CITY OF OPA-LOCKA

The City of Bright Opportunities

REGULAR COMMISSION MEETING
Agenda

Wednesday, January 10, 2024
7:00 PM

Commission Chamber
780 Fisherman Street, 3rd Floor
Opa-locka, FL 33054

City Commission
Mayor John H. Taylor, Jr.
Vice Mayor Natasha L. Ervin
Commissioner Sherelean Bass
Commissioner Joseph L. Kelley
Commissioner Veronica Williams

Appointed Officials
Interim City Manager Darvin Williams
City Attorney Burnadette Norris-Weeks
City Clerk Joanna Flores, CMC

SPEAKING BEFORE THE CITY COMMISSION

NOTE: All persons speaking shall come forward and give your full name and address, and the name and address of the organization you are representing.

There is a three (3) minute time limit for speaker/citizens forum and participation at all city commission meetings and public hearings. Your cooperation is appreciated in observing the three (3) minute time limit policy. If your matter requires more than three (3) minutes, please arrange a meeting or an appointment with the City Clerk prior to the commission meeting. City of Opa-locka Code of Ordinances Section 2-57

DECORUM POLICY

Any person making impertinent or slanderous remarks or who become boisterous while addressing the commission, shall be declared to be out of order by the presiding officer, and shall be barred from further audience before the Commission by the presiding officer, unless permission to continue or again address the commission be granted by the majority vote of the commission members. City of Opa-locka Code of Ordinances Section 2-58

NOTICE TO ALL LOBBYISTS

Any person appearing in a paid or remunerated representative capacity before the city staff, boards, committees and the City Commission is required to register with the City Clerk before engaging in lobbying activities. *City of Opa-locka Code of Ordinances Section 2-18*

FLORIDA STATUTES, CHAPTER 285.0105

"If a person decides to appeal any decision made by the Board, Agency or Commission with respect to the proceedings, and that, for such purpose, that person may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based."

PROCEDURES FOR PUBLIC PARTICIPATION

How to watch the meeting

Members of the public can watch public meetings and public hearings at https://www.youtube.com/user/CityofOpaLocka

City Commission Meetings are held in-person while allowing virtual participation. Members of the public wishing to address the Commission may do so in person or virtually.

To participate virtually, please register by 7:00 p.m. on the scheduled meeting date via the City of Opa-locka website at www.opalockafl.gov.

CITY OF OPA-LOCKA

"The City of Bright Opportunities"

AGENDA
REGULAR COMMISSION MEETING
January 10, 2024
7:00 PM

1. **CALL TO ORDER:**

2. **ROLL CALL:**

3. **INVOCATION:**

4. **PLEDGE OF ALLEGIANCE:**

5. **AWARDS/PROCLAMATIONS/ACKNOWLEDGMENTS:**

6. **APPROVAL OF CONSENT AGENDA AND PULL LIST (deferrals and deletions)**

7. **APPROVAL OF AGENDA:**

8. **APPROVAL OF MINUTES:**

   Regular Commission Meeting Minutes - December 12, 2023

9. **DISTRICT ONE / DISTRICT TWO - COUNTY COMMISSIONER REPORT:**

10. **PUBLIC PRESENTATIONS:**

11. **CITIZENS' FORUM:**
    (Opportunity for discussion of any concerns – please limit to 3 minutes)

12. **ACTION ITEMS (items from consent agenda pull list):**

13. **ADMINISTRATION:**

CONSENT AGENDA:

1. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA, AUTHORIZING AN AGREEMENT WITH BRYANT MILLER OLIVE P.A. TO PROVIDE BOND COUNSEL SERVICES FOR THE CITY'S DEBT RELATED FINANCING; PROVIDING FOR ADOPTION OF**

REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by City Attorney*

2. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA, AUTHORIZING AN AGREEMENT WITH GREENSPOON MARDER, LLP TO PROVIDE BOND COUNSEL SERVICES FOR THE CITY'S DEBT RELATED FINANCING; PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

3. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO TAKE ALL NECESSARY STEPS TO PURCHASE A NEW CITY BUS TO BE UTILIZED FOR THE TRANSPORTATION OF SENIOR CITIZENS; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** S*ponsored by Mayor Taylor*

4. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPOINTING MEMBERS TO THE CHARTER REVIEW BOARD; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Mayor Taylor*

5. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, TERMINATING INTERIM CITY MANAGER DARVIN WILLIAMS; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Commissioner Kelley*

6. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS ("RFP") FOR A PUBLIC RELATIONS AND MARKETING CONSULTANT CONSISTENT WITH THE SCOPE OF SERVICES OUTLINED IN EXHIBIT "A", ATTACHED HERETO; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Commissioner Kelley*

7. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS ("RFP") FOR QUALIFIED FINANCIAL INSTITUTIONS TO OFFER FINANCING TERMS FOR THE REFINANCING OF CERTAIN CURRENT CITY DEBT AND CERTAIN CAPITAL PROJECTS IN AN RFP FORM TO BE APPROVED BY THE CITY ATTORNEY PRIOR TO ISSUANCE; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

8. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THREE BIDS FOR COMMUNITY ENGAGEMENT SERVICES IN CONNECTION WITH EDUCATING THE PUBLIC ON THE NEED TO REFINANCE A BOND FOR CERTAIN INGRAM PARK IMPROVEMENTS AND FOR AIR CONDITIONING CHILLER REPAIR SERVICES AT THE CITY'S**

MUNICIPAL COMPLEX; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Interim City Manager*

9. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SELECTION OF POPULAR BANK AS AN EXEMPTION TO COMPETITIVE PROCUREMENT; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

10. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING EXECUTION FOR THE ENVIRONMENTAL REVIEW EXCEPTION FORM AND OTHER NECESSARY DOCUMENTS RELATED TO THE CANAL PROJECT GRANT REQUEST FOR THE CANAL LOCATED AT NW 127TH STREET; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

11. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE CITY MANAGER TO PIGGYBACK THE CITY OF MIAMI CONTRACT WITH H&R PAVING, INC. FOR QUALIFIED PROFESSIONAL SERVICES FOR PAVEMENT RESURFACING (CITY OF MIAMI IFB #1115382(28), AND ENTER INTO AN AGREEMENT WITH H&R PAVING, INC FOR PAVEMENT RESURFACING THROUGHOUT THE CITY, FOR PHASE V OF THE CITY SIDEWALK INSTALLATION PROJECT, IN AN AMOUNT NOT TO EXCEED TWO HUNDRED FIFTY-EIGHT THOUSAND, FOUR HUNDRED THIRTY SIX DOLLARS AND EIGHTEEN CENTS ($258,436.18); PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

12. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A PUBLIC TRANSPORTATION GRANT AGREEMENT WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION, ATTACHED HERETO AS EXHIBIT "A"; AUTHORIZING CITY FUNDING TO SUPPORT A 50% GRANT MATCHING REQUIREMENT FOR AN AMOUNT UP TO THREE HUNDRED, FORTY-NINE THOUSAND FOUR HUNDRED SEVENTY-SIX DOLLARS ($349,476.00) TO SERVICE A SOUTHERN ROUTE SHUTTLE BUS FOR RESIDENTS OF THE CITY AND ADJACENT AREAS; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

13. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA, ACCEPTING THE PROPOSAL OF SAFA CONSTRUCTION, LLC FOR THE SESAME STREET CULVERT REPLACEMENT WITHIN THE CITY, PURSUANT TO RFP NO. 23-1016200 AND FURTHER AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO AN AGREEMENT WITH SAFA CONSTRUCTION, LLC FOR SAID SERVICES, IN AN AMOUNT NOT TO EXCEED ONE MILLION, TWO HUNDRED THOUSAND DOLLARS ($1,200,000.00) AND IN THE FORM ATTACHED HERETO AS EXHIBIT "A"; FURTHER AUTHORIZING A PROJECT CONTINGENCY BUDGET, IN A TOTAL**

AMOUNT NOT TO EXCEED TWENTY-FIVE THOUSAND DOLLARS ($25,000.00); PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Interim City Manager*

14. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, RATIFYING A GRANT APPLICATION THAT WAS SUBMITTED TO THE FLORIDA DEPARTMENT OF TRANSPORTATION FOR THE TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

15. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA, ACCEPTING THE PROPOSAL OF CHEN MOORE AND ASSOCIATES, INC. FOR CITYWIDE URBAN FOREST PLAN SERVICES, PURSUANT TO RFP NO. 23-1128200 AND FURTHER AUTHORIZING THE EXECUTION OF AN AGREEMENT WITH CHEN MOORE AND ASSOCIATES, INC. FOR SAID SERVICES, IN AN AMOUNT NOT TO EXCEED EIGHTY SEVEN THOUSAND, SIX HUNDRED SIXTY DOLLARS ($87,660.00) AND IN THE FORM ATTACHED HERETO AS EXHIBIT "A"; PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

16. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING ISSUANCE OF A REQUEST FOR PROPOSALS ("RFP") FOR THE REHABILITATION OF LIFT STATIONS 9 AND 16, WITHIN THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

17. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE CITY MANAGER TO IMPLEMENT A PILOT PROGRAM TO ELIMINATE FATS, OIL, AND GREASE (FOG) IN THE CITY'S SANITARY SEWER SYSTEM; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

18. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO REQUEST THAT MIAMI-DADE COUNTY CONDUCT A FEASIBILITY STUDY TO INSTALL A PEDESTRIAN CROSSWALK ON FISHERMAN STREET IN FRONT OF CITY HALL, WITHIN THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

19. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A SOLE SOURCE CONTRACT WITH HYDRA SERVICE, INC., IN AN AMOUNT NOT TO EXCEED FORTY-ONE THOUSAND, TWELVE DOLLARS ($41,012.00), FOR THE DIRECT PURCHASE OF TWO SUBMERSIBLE REPLACEMENT PUMPS FOR PUMP STATION NO. 14., WITHIN THE CITY;**

PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Interim City Manager*

20. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A SOLE SOURCE CONTRACT WITH HYDRA SERVICE, INC., IN AN AMOUNT NOT TO EXCEED TWENTY-EIGHT THOUSAND, SIX HUNDRED THIRTY DOLLARS ($28,630.00), FOR THE DIRECT PURCHASE OF A SUBMERSIBLE REPLACEMENT PUMP FOR PUMP STATION NO. 11-A, WITHIN THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

21. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A SOLE SOURCE CONTRACT WITH IN-PIPE TECHNOLOGY COMPANY, INC., IN AN AMOUNT NOT TO EXCEED TWENTY-FIVE THOUSAND DOLLARS ($25,000.00), FOR THE DIRECT PURCHASE OF AN AOP-16 LIFT STATION ODOR CONTROL UNIT FOR PUMP STATION NO. 11-A, WITHIN THE CITY PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

22. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO AND EXECUTE A VOLUNTARY COOPERATION AND OPERATIONAL ASSISTANCE MUTUAL AID AGREEMENT BETWEEN THE CITY OF OPA-LOCKA, FLORIDA AND THE CITY OF MIAMI BEACH POLICE DEPARTMENT, ATTACHED HERETO AS EXHIBIT "A", FOR LAW ENFORCEMENT SERVICES AND RESOURCES; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

23. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE RETIREMENT AND CONVEYANCE OF THE CITY OF OPA-LOCKA POLICE DEPARTMENT CANINE THOR TO HIS HANDLER; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

24. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA, ACCEPTING THE PROPOSAL OF KING'S WRECKER SERVICE, INC. FOR CITYWIDE TOWING SERVICES, PURSUANT TO RFP NO. 23-1019200 AND FURTHER AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO AN AGREEMENT WITH KING'S WRECKER SERVICE, INC. FOR SAID SERVICES, IN A FORM ACCEPTABLE TO THE CITY ATTORNEY; PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

25. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO PIGGYBACK**

THE OMNIA PARTNERS COOPERATIVE PURCHASING AGREEMENT WITH AFFORDABLE INTERIOR SYSTEMS, INC., IN AN AMOUNT NOT TO EXCEED SIXTY-ONE THOUSAND THREE HUNDRED THIRTY-SIX DOLLARS AND FORTY-FIVE CENTS ($61,336.45) TO FURNISH THE POLICE DEPARTMENT; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Interim City Manager*

14. NEW ITEMS:

15. PLANNING & ZONING:

A. PUBLIC HEARINGS:

1. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SPECIAL EXCEPTION REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING IN THE SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT (R-1), ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

2. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE FINAL SITE PLAN FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

B. APPEALS:

16. ORDINANCES/RESOLUTIONS/PUBLIC HEARINGS:

A. FIRST READING ORDINANCE(S)/PUBLIC HEARING(S):

1. **AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

2. **AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT**

MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Interim City Manager*

3. **AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PIGGYBACKING THE SOURCEWELL COOPERATIVE PROGRAM AGREEMENT 101221-VTR WITH ENVIRONMENTAL PRODUCTS GROUP, INC. TO ACCEPT A FOUR-YEAR CAPITAL LEASE AGREEMENT FOR THE PURCHASE OF A VACTOR MODEL 2115I MOUNTED ON A NEW 2023 FREIGHTLINER MODEL 114SD TRUCK CHASSIS, IN THE AMOUNT OF FOUR HUNDRED SEVENTY THOUSAND EIGHT HUNDRED FORTY-ONE DOLLARS AND TWENTY-FOUR CENTS ($470,841.24); PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

B. SECOND READING ORDINANCE(S)/PUBLIC HEARING(S):

1. **AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, ENTITLED "OFF-STREET PARKING AND LOADING REQUIREMENTS" TO SPECIFICALLY AMEND SECTION 2-152(F) ENTITLED "GENERAL PRINCIPLES" TO PROVIDE FOR OUTDOOR STORAGE OF VEHICLES ONLY IN A DESIGNATED PARKING SPACE, PROHIBITING DOUBLE PARKING AND REQUIRING THAT ALL AREAS ARE FREE FROM UNSIGHTLY CONDITIONS; AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, SPECIFICALLY SECTION 2-160 (C)(4) ENTITLED "PERMITTED OFF-STREET PARKING" TO REQUIRE A CURRENT VALID LICENSE PLATE FOR RESIDENTIAL PARKING AND FURTHER REQUIRING THAT VEHICLES PARKED AT COMMERCIAL AND INDUSTRIAL FACILITIES HAVE A VALID LICENSE PLATE AND OR BILL OF SALE AND WORK ORDER POSTED VISIBLY ON THE DRIVER'S SIDE WINDOW, INCLUDING VIN NUMBER FOR VEHICLE, BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION IN CODE; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Mayor Taylor*

C. RESOLUTION(S):

17. CITY MANAGER'S REPORT:

18. OFFICIAL BOARD REPORTS:

19. MAYOR/COMMISSION REPORTS:

1. Mayor John H. Taylor Jr.
   Financial Oversight Update provided by Interim City Manager Darvin Williams
   City Manager Search Update provided by Human Resources Director Mary Adams on behalf of the Employee Relations Group

20. OFFICIAL BOARD APPOINTMENTS:

Civil Service Board
1 individual appointment (Commissioner Bass)
1 individual appointment (Commissioner Williams)

Housing Authority and Nuisance Abatement Board
1 individual appointment (Mayor Taylor)
1 individual appointment (Commissioner Williams)

Local Financial Oversight Board
1 at-large appointment

Teen & Young Adult Advisory Board
1 individual appointment (Commissioner Bass)
1 individual appointment (Commissioner Kelley)

21. ADJOURNMENT:

SCHEDULE OF FUTURE WORKSHOPS/OFFICIAL ACTIVITIES

1. **City of Opa-locka Community Baby Shower hosted by Commissioner Dr. Sherelean Bass, Sunday, January 7, 2024 from 1:30 PM to 4:30 PM, Sherbondy Village, 215 Perviz Avenue, Opa-locka, FL. For more info, please call (305) 953-2868 Ext. 1104.**

2. **City of Opa-locka Walking One Stop hosted by Vice Mayor Natasha L. Ervin, the Opa-locka Police Department and Wayne Rawlins, Monday, January 8, 2024 from 9:30 AM - 12:00 PM, Magnolia North (Triangle area), Opa-locka, FL. Please call (305) 681-1033 for more information.**

3. **City of Opa-locka Swearing In Ceremony for Chief Kenneth Ottley and Assistant Chief Robin Starks, Monday, January 8, 2024 at 6:00 PM, Sherbondy Village Community Center, 215 Perviz Avenue, Opa-locka, FL. RSVP: kconde@opalockapd.com**

4. **City of Opa-locka Mayor & Commission invite you to the Annual Dr. Martin Luther King Jr. Walk, Saturday, January 13, 2024 at 9:00 AM. Starting location: Southwest corner of NW 151st Street and NW 27th Avenue.**

5. **City of Opa-locka Special Planning & Zoning Board of Appeals Meeting, Tuesday, January 16, 2024 at 7:00 p.m., City Commission Chambers, 780 Fisherman Street, 3rd Floor, Opa-locka, Florida.**

6. **Opa-locka Community Redevelopment Agency Special Meeting, Tuesday, January 23, 2024 at 6:00 PM, Opa-locka Government Center, Commission Chambers, 780 Fisherman Street, 3rd Floor, Opa-locka, FL.**

7. **City of Opa-locka State of the City Address presented by the Honorable Mayor John H. Taylor Jr., Wednesday, January 31, 2024 at 6:00 PM, Sherbondy Village, 215 Perviz Avenue, Opa-locka, FL. RSVP required by calling (305) 953-2800 or emailing jflores@@opalockafl.gov..**

8. **City of Opa-locka Mayor & Commission in partnership with Farm Share and Miami-Dade County invites the community to a Monthly Free Food Walk-Thru Distribution hosted by Commissioner Joseph L. Kelley, Wednesday, February 7, 2024 from 10:00 A.M. - 1:00 P.M., first come, first served, at Sherbondy Park Pavilion, 777 Sharazad Boulevard, Opa-locka, Florida.**

9. **City of Opa-locka Mayor & Commission invite you to Commissioner Joseph L. Kelley's Meet Me Monday, February 12, 2024 at 6:00 PM at a location to be determined.**

10. **Free aerobics classes sponsored by Mayor John H. Taylor, Jr. every Monday & Wednesday from 6 p.m. - 7 p.m., Sherbondy Village, 215 Perviz Avenue, Opa-locka, FL.**

For further information, please contact the Office of the City Clerk by telephone at (305) 953-2800 or email jflores@opalockafl.gov.

CITY OF OPA-LOCKA

"The City of Bright Opportunities"

REGULAR COMMISSION MEETING
Wednesday, December 13, 2023
7:00 PM

1. CALL TO ORDER:

Mayor Taylor called the meeting to order at 7:05 PM on Wednesday, December 13, 2023, at the City of Opa-locka Municipal Complex, 780 Fisherman Street, 3rd Floor, Opa-locka, Florida.

2. ROLL CALL:

The following members of the City Commission were present: Commissioner Sherelean Bass; Vice Mayor Natasha L. Ervin, Commissioner Joseph L. Kelley; Commissioner Veronica Williams; and Mayor John H. Taylor, Jr. Also, in attendance were: Assistant City Manager George Ellis, Assistant City Attorney Candice Cobb, City Attorney Burnadette Norris-Weeks, and City Clerk Joanna Flores.

3. INVOCATION:

The invocation was delivered by Commissioner Bass.

4. PLEDGE OF ALLEGIANCE:

The pledge of allegiance was recited in unison.

5. AWARDS/PROCLAMATIONS/ACKNOWLEDGMENTS:

Special presentation by Commissioner Dr. Sherelean Bass for Veterans Day Event

Commissioner Bass recognized Erica Green for her contribution to the Veterans Day event.

6. APPROVAL OF CONSENT AGENDA AND PULL LIST (deferrals and deletions):

Commissioner Bass requested to have Item 5 pulled from the Consent Agenda.

Vice Mayor Ervin requested to have Item 3 pulled from the Consent Agenda.

It was moved by Vice Mayor Ervin, seconded by Commissioner Kelley, to approve the Consent Agenda, as amended.

There being no discussion, the motion to approve the Consent Agenda passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

7. APPROVAL OF AGENDA:

City Clerk Flores noted one add on item.

Assistant City Attorney Cobb read the title of Item 14-1 into the record. Chief Ottley stated the emergency nature.

It was moved by Vice Mayor Ervin, seconded by Commissioner Bass, to add Item 14-1 to the Agenda.

There being no discussion, the motion to add Item 14-1 to the Agenda passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

It was moved by Commissioner Kelley, seconded by Vice Mayor Ervin, to approve the Agenda, as amended.

8. APPROVAL OF MINUTES:

Workshop Meeting Minutes - October 20, 2023

It was moved by Commissioner Kelley, seconded by Commissioner Bass, to approve the Minutes –October 20, 2023.

There being no discussion, the motion to approve the Minutes passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

Workshop Meeting Minutes - October 25, 2023

It was moved by Commissioner Kelley, seconded by Vice Mayor Ervin, to approve the Minutes –October 25, 2023.

There being no discussion, the motion to approve the Minutes passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

Special Commission Meeting Minutes - November 1, 2023

It was moved by Commissioner Kelley, seconded by Commissioner Williams, to approve the Minutes –November 1, 2023.

There being no discussion, the motion to approve the Minutes passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

Workshop Meeting Minutes - November 8, 2023

It was moved by Commissioner Kelley, seconded by Commissioner Williams, to approve the Minutes –November 8, 2023.

There being no discussion, the motion to approve the Minutes passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

Regular Commission Meeting Minutes - November 8, 2023

It was moved by Commissioner Kelley, seconded by Commissioner Bass, to approve the Minutes –November 8, 2023.

There being no discussion, the motion to approve the Minutes passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes

Commissioner Bass Yes
Mayor Taylor Yes

9. DISTRICT ONE / DISTRICT TWO - COUNTY COMMISSIONER REPORT:

There was no report.

10. PUBLIC PRESENTATIONS:

There were none.

11. CITIZENS' FORUM:
(Opportunity for discussion of any concerns – please limit to 3 minutes)

City Clerk Flores announced the protocol for public participation at City Commission meetings.

City Clerk Flores stated there are no virtual public comments.

Mayor Taylor opened the Citizens' Forum.

Mr. Andrew Herman, 1770 Opa-locka Boulevard, said he recently started having issues with the Police Department. He described recent personal situations. He asked the City Commission to look into it.

Ms. Audrey Dominguez, 1147 Jann Avenue, said Resolution 3 is a great idea and she commends the idea. She also spoke about Resolution 8 and said it is time to part ways with the PR firm. She noted they receive most of their updates through Facebook via Vice Mayor Ervin and Commissioner Kelley. She commended the City Clerk for her flyer designs. She asked for an update on the meeting held on September 13m 2023, regarding the RFP for the gateway signage. She noted it has been 90 days and money was allocated. She inquired about the status regarding the evaluation of charter members. She mentioned being excited she is about the beautiful work being done on the old historical City Hall.

Mr. Alex Van Meckel, 806 Jann Avenue, wished the City Commission happy holidays. He expressed disappointment that the City Commission wants to part ways with the PR firm. He said they have been doing incredible work on the City's brand, reputation, and relationship building. He said they will set themselves back. He said the resolution is an abomination.

Mayor Taylor asked the Assistant City Manager Ellis to have someone high-ranking from the Police Department to speak to Mr. Herman. Commissioner Kelley requested an update on the issues that were brought forward by Mr. Herman.

Mayor Taylor thanked Ms. Dominquez for her support. He said the charter member template passed a few months ago but they have not moved forward. He noted the City Commission will discuss.

Mayor Taylor acknowledged Mr. Van Meckel's concerns.

12. ACTION ITEMS (items from consent agenda pull list):

1. **[13-1] A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER AND CITY CLERK TO WORK WITH MAYOR JOHN H. TAYLOR TO DEVELOP AND IMPLEMENT A "BRIGHT HOME OF THE MONTH" PROGRAM, ENCOURAGING AND INCENTIVIZING RESIDENTS TO BEAUTIFY THEIR HOMES; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Mayor Taylor*

The above resolution was read by Assistant City Attorney Candice Cobb.

It was moved by Commissioner Bass, seconded by Vice Mayor Ervin, to discuss Agenda Item 12-1.

Mayor Taylor introduced the item. He said the Resolution is to request an amount of $2,500 to incentivize the program.

Vice Mayor Ervin asked if there would be a plaque. Mayor Taylor there will be a plaque or signage, plus a gift card for the winner.

Commissioner Bass asked if this will be incorporated into the Beautification Plan. Mayor Taylor said it can be engrafted into it the plan.

Commissioner Kelley liked the idea. He asked about the implementation. He requested to include one resident in the evaluation process. Mayor Taylor explained the process, including a nomination form and an evaluation committee.

There being no additional discussion, the motion to approve the Resolution passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

2. **[13-5] A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO MULCH ALL CITY THOROUGHFARES, ROUNDABOUTS, AND OTHER AREAS DEEMED NECESSARY FOR BEAUTIFYING THE CITY NO LATER THAN JANUARY 9, 2024, AT A TOTAL COST NOT TO EXCEED SIX**

THOUSAND, FOUR HUNDRED AND FIFTY DOLLARS ($6,450.00); PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Commissioner Kelley*

The above resolution was read by Assistant City Attorney Candice Cobb.

It was moved by Commissioner Kelley, seconded by Commissioner Williams, to discuss Agenda Item 12-2.

Commissioner Kelley introduced the item. He said mulch can make the City look better. He noted the timeline shifted. He said it could be included in the weekly or monthly schedule and should be part of the beautification plan. He stated even if they have to do a budget amendment in the future, it is well worth it.

Commissioner Bass agreed the City needs sprucing up, but she does not agree with mulch. She said sod would be more appropriate and will last longer. She expressed concern about the mulch washing way and the amount of work for staff. She asked Mr. King for his opinion.

Mr. King said he prefers mulching for beautification efforts.

Commissioner Williams asked to hear Mr. King's presentation from the previous meeting since she missed it. She said she does not want to piecemeal beautification projects. Mr. King said mulching was included in the beautification plan.

Commissioner Kelley clarified that the backup said that mulching was not included but he would like to see it included. Mr. King reiterated it is part of the plan and he apologized if it was not included. He said the efforts throughout the City include mulch, plants, and sod.

Mayor Taylor asked the Assistant City Manager to schedule individual meetings with Mr. King to better understand the beautification plan.

There being no additional discussion, the motion to approve the Resolution passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

13. ADMINISTRATION:

CONSENT AGENDA:

1. A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO

TAKE ALL NECESSARY STEPS TO SUPPORT THE OPA-LOCKA PRESERVATION ASSOCIATION IN THE CREATION AND DEVELOPMENT OF THE OPA-LOCKA HERITAGE TRAIL, A 15-STATION OUTDOOR WALKING MUSEUM EXPERIENCE LOCATED IN THE DOWNTOWN AREA OF THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Mayor Taylor*

2. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO DEVELOP AN OPA-LOCKA CITYWIDE HOUSING TASK FORCE TO ENSURE THAT ALL HOUSING COMPLEXES WITHIN THE CITY ARE ADHERING TO MUNICIPAL, COUNTY, STATE AND FEDERAL REGULATIONS AND ARE OF LIVABLE STANDARDS; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Mayor Taylor*

3. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER AND CITY CLERK TO WORK WITH MAYOR JOHN H. TAYLOR TO DEVELOP AND IMPLEMENT A "BRIGHT HOME OF THE MONTH" PROGRAM, ENCOURAGING AND INCENTIVIZING RESIDENTS TO BEAUTIFY THEIR HOMES; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Mayor Taylor*

4. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE CITY ATTORNEY TO EXPLORE, RESEARCH AND TAKE NECESSARY STEPS TO JOIN THE WATER CONTAMINATION CLASS ACTION LAWSUIT PERTAINING TO POLYFLUOROALKYL SUBSTANCES (PFAS), IF DEEMED TO BE IN THE BEST INTEREST OF THE CITY OF OPA-LOCKA; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Mayor Taylor*

5. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO MULCH ALL CITY THOROUGHFARES, ROUNDABOUTS, AND OTHER AREAS DEEMED NECESSARY FOR BEAUTIFYING THE CITY NO LATER THAN JANUARY 9, 2024, AT A TOTAL COST NOT TO EXCEED SIX THOUSAND, FOUR HUNDRED AND FIFTY DOLLARS ($6,450.00); PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Commissioner Kelley*

6. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO PROVIDE A DETAILED REPORT OF ALL EXPENDITURES NOT EXCEEDING THE TWENTY-FIVE THOUSAND DOLLAR ($25,000.00) PURCHASING AUTHORITY OF THE INTERIM CITY MANAGER, OR PAST CITY MANAGER, FOR THE PERIOD JANUARY 1, 2022 THROUGH SEPTEMBER 1, 2023 NO LATER THAN DECEMBER 29, 2023; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Commissioner Kelley*

7. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO PROVIDE THE CITY COMMISSION WITH AN UPDATED AND DETAILED REPORT OF THE CITY'S 5-YEAR FINANCIAL RECOVERY PLAN NO LATER THAN JANUARY 5, 2024; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Commissioner Kelley*

8. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, TERMINATING THE PUBLIC RELATIONS AND MARKETING CONSULTANT SERVICES AGREEMENT WITH ROAR MEDIA, LLC. FOR CONVENIENCE; PROVIDING FOR A THIRTY-DAY NOTICE OF TERMINATION; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Commissioner Kelley*

9. **A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE RECOMMENDATION OF THE HISTORIC ENVIRONMENTAL PRESERVATION BOARD TO ISSUE A SPECIAL CERTIFICATE OF APPROPRIATENESS FOR COMPLETE INTERIOR RENOVATION OF THE EXISTING STRUCTURE AND STRIP EXTERIOR WALLS TO CONCRETE MASONRY UNIT; KITCHEN AND ALL BATHROOM PLUMBING FIXTURES TO BE RECONFIGURED AND REPLACED; ALL EXTERIOR WINDOWS AND DOORS TO BE REMOVED AND REPLACED WITH IMPACT WINDOWS AND DOORS TO CODE; REMOVE AND REPLACE EXISTING FLOOR JOISTS AS NEEDED; REPAIR CEILING RAFTERS AS NEEDED; REPAIR EXTERIOR STUCCO AS NEEDED AND REPAINT; RAISE WEST ELEVATION WINDOWS TO THEIR ORIGINAL HEIGHT OF 3 FEET ABOVE FINISHED FLOOR TO COMPLETE THE RESTORATION AND RENOVATION OF THE STRUCTURE AT 1011 SHARAR AVENUE PROPOSED FOR THIS REGISTERED HISTORIC PROPERTY; PROVIDING FOR AN EFFECTIVE DATE.** *Sponsored by Interim City Manager*

Vote taken on Consent Agenda items can be viewed under Agenda Item 6 - Approval of

the Consent Agenda.

14. NEW ITEMS:

1. A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ACCEPT GRANT FUNDING FROM THE FLORIDA DEPARTMENT OF LAW ENFORCEMENT (FDLE) FOR FISCAL YEAR 2023-2024 EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT PROGRAM IN THE AMOUNT OF $3,772.00 FOR AUTOMATED EXTERNAL DEFIBRULATOR REPLACEMENT PARTS; FURTHER AUTHORIZING THE INTERIM CITY MANAGER TO EXECUTE THE GRANT PROGRAM AWARD AGREEMENT BETWEEN THE FLORIDA DEPARTMENT OF LAW ENFORCEMENT AND THE CIT OF OPA-LOCKA, FLORIDA; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE. *Sponsored by Interim City Manager*

The above resolution was read by Assistant City Attorney Candice Cobb.

Assistant City Manager Ellis introduced the item.

Commissioner Kelley asked if it is reimbursable. Interim City Manager Ellis said Chief Ottley would have to answer that question.

Commissioner Kelley inquired when they heard about the grant. Chief Ottley explained that they have been working through the process for several months. He clarified it is a straight grant and not reimbursable. He further explained the process.

Commissioner Kelley said the documentation indicates that it is a cost reimbursable deliverable.

There being no additional discussion, the motion to approve the Resolution passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

15. PLANNING & ZONING:

A. PUBLIC HEARINGS:

B. APPEALS:

There were none.

16. ORDINANCES/RESOLUTIONS/PUBLIC HEARINGS:

A. FIRST READING ORDINANCE(S)/PUBLIC HEARING(S):

B. SECOND READING ORDINANCE(S)/PUBLIC HEARING(S):

C. RESOLUTION(S):

There were none.

17. CITY MANAGER'S REPORT:

1. Update on the City's 5-Year Financial Recovery Plan

Assistant City Manager Ellis introduced the item.

Mr. Dake Schwarte, Senior Budget Analyst, highlighted the following: Executive Summary; and General Fund Revenue.

Commissioner Kelley asked about loss of revenue from lowering the millage rate. Mr. Schwarte confirmed it will restrict some of the CIP projects.

Commissioner Kelley inquired about the sewer and stormwater numbers. Mr. Schwarte said he is not aware of the numbers from the rate study. He said their analysis is based on what the Budget Department assumed.

Mr. Robert Anathan, Budget Administrator, said the contract has not yet been awarded for the rate study. He said only one firm has bid on the rate study. He said they assumed 10% for the purpose of the exercise.

Mr. Schwarte continued the presentation and reviewed the following: General Fund Balance; Water and Sewer Fund; Stormwater Fund; Stormwater Fund Balance; and CIP Investments.

Mayor Taylor requested to see the CIP Investment for 2024. Mr. Schwarte referenced Page 19 in the provided booklet and summarized the data.

Mr. Schwarte noted that ARPA funding is also included on Page 25.

Commissioner Kelley noticed that annexation is not considered due to complexity. Mr. Schwarte said they needed to start with a benchmark, which is why they did not include annexation. He added that they are not taking it off the table, but the complexity and the variables are vast.

Mayor Taylor stressed that the City Commission passed a resolution for an annexation plan.

Mr. Anathan said the funding needs to be spent now so they can put some reasonable parameters around it.

Commissioner Kelley expressed concern that annexation is not considered. He asked Assistant City Manager Ellis to schedule individual meetings with the Commissioners and the Budget Administration Department to understand the 5-Year Financial Recovery Plan.

Mayor Taylor asked if it is a draft plan. Mr. Anathan replied that it is a dynamic document. He recommended a spring workshop leading into the next budget cycle.

Commissioner Williams stated they voted on a firm to explore annexation feasibility and it should have been added to the plan. She asked for the same sense of urgency for the Commission's projects.

Mr. Anathan clarified that the annexation is moving forward and is covered by the budget. It was just not mentioned tonight.

Assistant City Manager Ellis confirmed he will set up individual meetings with the Budget Administration Department and the Commissioners.

Commissioner Kelley requested an update on Carroll Lane. He also asked if there is an opportunity to provide a bonus for City employees for the holidays. City Attorney Norris-Weeks stated there is a statute that needs to be followed. She will provide it to the City Commission.

18. OFFICIAL BOARD REPORTS:

There were none.

Mayor Taylor expressed concern there are Boards who are not meeting due.

Assistant City Manager Ellis will look into it and provide an update later this week.

19. MAYOR/COMMISSION REPORTS:

1. **Mayor John H. Taylor Jr.**
   Financial Oversight Update provided by Interim City Manager Darvin Williams
   Next Steps for City Manager Search

Assistant City Manager Ellis said they recently came back from Tallahassee and met with those responsible for oversight. He said they have not had any meetings with the local Financial Oversight Board within the last year and a half.

Mayor Taylor said they recently switched auditors and the Commission is interested in the timeline of the audit. He requested an update.

Mayor Taylor asked if the HR Director started. Ms. Mary Adams said she has not received an executed contract or purchase order, so she is not authorized to present herself as the City's HR Director at this time.

Mayor Taylor asked about the holdup on the contract. Assistant City Manager Ellis said he does not know the answer.

Commissioner Williams said they are on the second meeting and the contract has still not been signed, which is preventing the City Manager search from moving forward. She does not like when management does not speak with her, including the Interim City Manager not being in attendance for the second City Commission meeting in a row. She said they risk losing every single candidate. She stated that Assistant City Manager Ellis has no answers as well.

Assistant City Manager Ellis said he was not initially involved in contract, and he only heard about the process when he was in Tallahassee.

Commissioner Williams said being an Assistant City Manager means he should know what the Interim City Manager knows. She said it reflects poorly on the City Manager's Office that Assistant City Managers do not have answers.

Commissioner Kelley said everyone received the letter from the State to the City Manager's Office. He expected the things outlined in the letter to be completed by this City Commission meeting. He said they cannot move forward and demanded to see something by 5pm tomorrow from the Interim City Manager.

2. Commissioner Joseph L. Kelley
Jet Ski Waterway Enforcement
Legislative Review of Resolution No. 23-181 reference Outside Entity Human Resources Director

Commissioner Kelley explained the challenges between fishing in Ingram Park and jet skis. He asked the City Manager's Office and the City Attorney to look into this so he can bring legislation forth. He asked for direct and signage to be reinstalled to restrict the area. He asked for an update for the January meeting so he can sponsor legislation.

It was moved by Mayor Taylor, seconded by Commissioner Williams, for the City Manager's Office to complete the deliverables outlined and the signed contract by December 14, 2023, at 5pm.

There being no additional discussion, the motion passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

3. Commissioner Veronica J. Williams Citywide Beautification Plan

Commissioner Williams reiterated that they have a plan for each of them to meet with Mr. King individually. She recommended a workshop in 2024, featuring experts from other cities.

Mayor Taylor invited additional reports by the Commissioners.

Commissioner Bass announced that Commissioner Williams is the Assistant Principal of the Year. She said that bingo was phenomenal.

Vice Mayor Ervin said they need to find funding to purchase a pickup truck for Parks and Recreation. Mayor Taylor asked why they cannot repurpose the old Parks vans. Assistant City Manager agreed and noted they will look into it. She agreed with Commissioner Kelley's suggestion to provide a holiday bonus to City employees. She thanked the Commission, staff, and residents for a great bingo event. She expressed how pleased she was they could give out 500 turkeys for Thanksgiving. She said the Fishing Tournament was nice. She recognized the Town of Medley for sending 60 residents to Santa's Enchanted Forrest for free. She announced the Toy Drive at Sherbondy Park. She expressed gratitude for the art festival hosted in the City. She thanked her husband and Coach Mark for putting together 80 bicycles for the Toy Drive. She wished happy holidays to everyone.

Commissioner Kelley thanked her colleagues for supporting the Art of Transformation. He spoke about the turkey giveaways at Sherbondy Park and Feeding South Florida distribution. He noted there were at least 200 people at bingo, so they need at least 200 chairs for future bingo events. He said they honored food distribution volunteers at the most recent Meet Me Monday. He send the 2nd Annual Fishing Tournament featured all ages and 35 fish were caught. He said they are hosting a holiday light contest for the best lit home and the deadline to register is Friday. He commended Vice Mayor Ervin and the Booster Club on the Toy Drive. He asked the hours of operation and programming for Ingraham Park. He wished everyone a happy holiday.

Commissioner Williams recognized this year's tree lighting.

It was moved by Commissioner Williams, seconded by Mayor Taylor, to cancel the December 27, 2023, City Commission meeting.

There being no additional discussion, the motion passed by a 5-0 vote.

Vice Mayor Ervin Yes
Commissioner Kelley Yes
Commissioner Williams Yes
Commissioner Bass Yes
Mayor Taylor Yes

20. OFFICIAL BOARD APPOINTMENTS:

There were none.

21. ADJOURNMENT:

There being no further business to come before the City Commission, it was moved by Commissioner Williams, seconded by Vice Mayor Ervin to adjourn the meeting at 9:15 p.m.

_____
John H. Taylor Jr.
Mayor

Attest:

_____
Joanna Flores, CMC
City Clerk

Sponsored By: City Attorney

RESOLUTION NO. 24-

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING AN AGREEMENT WITH BRYANT MILLER OLIVE P.A. TO PROVIDE BOND COUNSEL SERVICES FOR THE CITY'S DEBT RELATED FINANCING; PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Debt financing has been recommended by the Interim City Manager as the most appropriate way to meet certain City of Opa-Locka ("City") financial obligations within the next two years; and

WHEREAS, the City Attorney has recognized that debt financing will require specialized bond counsel legal services; and

WHEREAS, the City is seeking special bond counsel to specifically review and opine upon bond related matters in connection with: 1) refinancing of the current FY 2015 Note financing for the City's Municipal Complex; 2) a new Municipal Complex air conditioning system; and 3) certain Ingram Park improvements; and

WHEREAS, the principal attorney for the bond counsel engagement would be JoLinda Herring, Managing Shareholder, with the law firm Bryant Miller Olive P.A. to provide the bond counsel services set forth in the retainer agreement attached hereto as Exhibit "A"; and

WHEREAS, the City Commission finds that authorizing an agreement with Bryant Miller Olive P.A. to provide bond counsel services is in the best interests of the City of Opa-Locka and its residents.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

S ECTION 2. The City Commission of the City of Opa-Locka, Florida hereby authorizes the bond counsel services of Bryant Miller Olive P.A., with the principal attorney for the bond counsel engagement being JoLinda Herring, in the retainer agreement form attached hereto as Exhibit "A."

SECTION 3. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

SECTION 4. This Resolution shall take effect upon adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

Bryant Miller Olive

Attorneys at Law
SunTrust International Center
1 S.E. 3rd Avenue
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Miami, FL 33131
Tel 305.374.7349
Fax 305.374.0895
www.bmolaw.com

January 4, 2024

Ms. Burnadette Norris-Weeks
City Attorney
City of Opa-Locka, Florida
780 Fisherman Street
Opa-Locka, Florida 33054

Re: Engagement of Bryant Miller Olive P.A.

Dear Ms. Norris-Weeks:

You have requested to retain Bryant Miller Olive P.A. (the "Firm") as Bond Counsel for the City of Opa-Locka, Florida (the "City"). The purpose of this letter is to advise you of the fee structure to be used by the Firm in its representation of the City and to describe the services the Firm will perform as Bond Counsel to the City. This letter also discloses and discusses the potential arising of conflicts of interest during this representation.

SCOPE OF ENGAGEMENT

In this transaction as Bond Counsel, we expect to perform the following duties:

(1) Review of proposed financing program as to legal feasibility, compliance with applicable law and pending or proposed revisions to the law, including United States Treasury regulations;

(2) Advice as to structuring procedures, required approvals and filings, schedule of events for timely debt issuance, and other legal matters relative to such debt;

(3) Attend meetings with the City staff and public officials, the financial advisor, the bank, underwriters and others as appropriate for development of the debt materials or dissemination of information in connection therewith;

(4) Prepare resolutions and any amendments thereto in order to authorize the debt;

(5) Preparation of all validation pleadings, including complaint, notice of service, proposed answer, memorandum of law, and proposed order and to conduct the validation proceeding, if required;

(6) If sale is by competitive bid, assist in preparation of the bid comments, notice of sale, evaluation of bids and any other documentation or action necessary to conduct a sale of the Bonds in that manner;

(7) Review the transcripts of all proceedings in connection with the foregoing and indicate any necessary corrective action;

(8) Prepare, obtain, deliver and file all closing papers necessary in connection with the Bonds and serve as the City's closing agent in connection with the Bonds;

(9) Review any disclosure documents prepared and authorized by the City, but only insofar as such documents describe the Bonds and summarize the underlying documents; and

(10) Subject to the completion of proceedings to our satisfaction, render our legal opinion (the "Bond Opinion") regarding the validity and binding effect of the Bonds, the source of payment and security for the Bonds, and, as applicable, the excludability of interest on the Bonds from gross income for federal income tax purposes.

Our Bond Opinion will be addressed to the City and will be delivered by us on the date the Bonds are exchanged for their purchase price (the "Closing").

The Bond Opinion will be based on facts and law existing as of its date. The Firm will not be obligated to update our Bond Opinion after the date rendered due to any subsequent changes in law or the interpretation thereof or changed circumstances that may affect the opinion as rendered. In rendering our Bond Opinion, we will rely on the certified proceedings and other certifications of public officials, officers of the City, the bank and other persons furnished to us without undertaking to verify the same by independent investigation, and we will assume continuing compliance by the City with applicable laws relating to the Bonds. During the course of this engagement, we rely on the City to provide us with complete and timely information on all developments pertaining to any aspect of the financing, the Bonds and the security for the Bonds. Among other things, we will require the City to execute a certificate of fact relating to the use of the proceeds of the Bonds.

LIMITATIONS ON SCOPE OF ENGAGEMENT

Our duties as Bond Counsel and Disclosure Counsel are limited to those expressly set forth above. Among other things, our scope of services as Bond Counsel and Disclosure

Counsel in connection with the issuance of the Bonds does not include, unless separately specifically engaged:

(a) Assisting in the preparation or review of an official statement, if any, or any other disclosure document with respect to the Bonds, or performing an independent investigation to determine the accuracy, completeness or sufficiency of any such document or rendering advice that the official statement or other disclosure document does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements contained therein, in light of the circumstances under which they were made, not misleading.

(b) Preparing blue sky or investment surveys with respect to the Bonds.

(c) Drafting state constitutional or legislative amendments.

(d) Pursuing test cases or other litigation (such as contested validation proceedings), except as set forth above.

(e) Making an investigation or expressing any view as to the creditworthiness of City, any credit enhancement provider, any liquidity provider or the Bonds.

(f) Assisting in the preparation of, or opining on, a continuing disclosure undertaking pertaining to the Bonds or, after the Bond is delivered to the purchaser thereof in exchange for the purchase price, providing advice concerning any actions necessary to assure compliance with any continuing disclosure undertaking.

(g) Representing the City in post-closing regulatory investigation or matters.

(h) After Closing, providing continuing advice to the City, the bank or any other party concerning any matter whatsoever.

(i) Providing any advice or opinions on bankruptcy matters.

(j) Review of post-closing investment contracts or provide legal services in connection with interest rate swaps or other financial product agreements.

(k) Provide business, financial or accounting advice.

(l) Conducting environmental due diligence or providing services with respect to the acquisition, construction or permitting of the Project.

(m) Addressing any other matter not specifically set forth above that is not required to render our Bond Counsel Opinion.

ATTORNEY-CLIENT RELATIONSHIP

As Bond Counsel, the City will be our client and an attorney-client relationship will exist between the City and the Firm. Our understanding is that the City Attorney will represent the City on certain matters. We assume that with each transaction other parties to the transaction will retain such counsel as they deem necessary and appropriate to represent the respective interests of such parties. In performing our legal services as Bond Counsel to the City, we will represent the interests of the City exclusively. We will not be representing any other party and will not be acting as an intermediary among the parties. Should the City desire to terminate its relationship with the Firm as Bond Counsel, it may do so by providing written notice to the Firm, which termination shall not be less than thirty (30) days after the date of the written notice.

CONFLICTS

The Firm has disclosed to the City that it currently and may in the future, serve as bond counsel, disclosure counsel, special counsel, or general counsel to other local governments and as special counsel to underwriters, banks, trustees and other parties that may from time to time transact business with the City in unrelated public finance matters. Such representations are standard and customary within the industry and the Firm can effectively represent the City and the discharge of the Firm's professional responsibilities to the City will not be prejudiced as a result, either because such engagements will be sufficiently different or because the potential for such prejudice is remote and minor and outweighed by consideration that it is unlikely that advice given to the other client will be relevant in any respect to the subject matter. The City acknowledges and agrees that the Firm's role as bond counsel, disclosure counsel, or special counsel to any local governmental entity or to any financial institution in conjunction with unrelated public finance transactions is not likely to create or cause any actual conflict, and service as disclosure, bond, or special counsel to other Firm clients will not *per se* be construed as a conflict or be objectionable to the City. Accordingly, the City expressly consents to such representation by the Firm consistent with the circumstances described above and waives any conflict of interest with respect thereto. The foregoing consent and waiver shall not apply and the Firm agrees not to undertake any representation in a controversy or litigation between City and any other client of the Firm, unless otherwise consented to in writing by the City.

FEES AND PAYMENT OF COSTS AND EXPENSES

The City will be responsible for payment of our flat fee of $24,500. Based upon: (i) our current understanding of the terms, structure, size and schedule of the financing represented by the Bonds; (ii) the duties we will undertake pursuant to this engagement letter; (iii) the time we anticipate devoting to the financing in connection therewith; and (iv) the responsibilities we will assume. Our fee may vary: (a) if the principal amount of Bonds actually issued differs significantly from the amount stated above; (b) if material changes in the structure or schedule of the financing occur; or (c) if unusual or unforeseen circumstances arise which require a significant increase in our time or responsibility. If, at any time, we believe that circumstances require an adjustment of our original fee estimate, we will advise you.

In addition to our proposed fees, we will be reimbursed for all client charges made or incurred in connection with the Bond issue. Such costs generally include travel costs, photocopying, document printing, deliveries, long distance telephone and conference call charges, telecopier charges, filing fees, computer-assisted research, transcript preparation and other expenses. Our fee is usually paid at the Closing, and we customarily do not submit any statement until the Closing unless there is a substantial delay in completing the financing. Detailed supporting documentation is available upon request for statement billings.

If the financing is not consummated, we understand and agree that we will not be paid our proposed fee; however, we expect that all out-of-pocket expenses are subject to reimbursement.

This letter is being sent to you electronically (.pdf file). If the foregoing is acceptable, please sign and email a copy to me at jherring@bmolaw.com. We look forward to working with you on successful financing transactions.

BRYANT MILLER OLIVE P.A.

By: JoLinda Herring

JoLinda Herring
Managing Shareholder

Accepted and Approved:

CITY OF OPA-LOCKA, FLORIDA

By: _____
Name: _____
Title: _____
Date: _____

Sponsored By: Interim City Manager

RESOLUTION NO. 24-

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING AN AGREEMENT WITH GREENSPOON MARDER, LLP TO PROVIDE BOND COUNSEL SERVICES FOR THE CITY'S DEBT RELATED FINANCING; PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Debt financing has been recommended by the Interim City Manager as the most appropriate way to meet certain City of Opa-Locka ("City") financial obligations within the next two years; and

WHEREAS, the City Attorney has recognized that debt financing will require specialized bond counsel legal services; and

WHEREAS, the City is seeking special bond counsel to specifically review and opine upon bond related matters in connection with: 1) refinancing of the current FY 2015 Note financing for the City's Municipal Complex; 2) a new Municipal Complex air conditioning system; and 3) certain Ingram Park improvements; and

WHEREAS, the principal attorney for the bond counsel engagement would be Morris G. Miller, who is proposing an hourly rate of $460.00 per hour; and

WHEREAS, the City Commission finds that authorizing an agreement with Greenspoon Marder, LLP to provide bond counsel services is in the best interests of the City of Opa-Locka and its residents.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

S ECTION 2. The City Commission of the City of Opa-Locka, Florida hereby authorizes the bond counsel services of Greenspoon Marder, LLP., with the principal attorney for the bond counsel engagement being Morris G. Miller in the retainer agreement form attached hereto as Exhibit "A."

SECTION 3. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

SECTION 4. This Resolution shall take effect upon adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

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City of Opa-locka
Agenda Cover Memo

DocuSigned by:
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City Manager:	Darvin Williams		**CM Signature:**					
Commission Meeting Date:		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**		
			X					
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**		
	X		**Public Hearing:** *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**	
					X		**X**	
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**		
						X		
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
		X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☒ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*				
	X							
Sponsor Name	City Manager		**Department:**	City Manager				

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the Interim City Manager to select Greenspoon Marder, P.A. to provide bond counsel services for the City's debt financing.

Staff Summary:

Debt financing is recommended as the most appropriate way to meet certain City requirements in the next two years; however, this will require a Bond Counsel. Staff recommends that the City Commission authorize the Interim City Manager to select Greenspoon Marder, P.A. to provide Bond Counsel services for debt financing to meet these City requirements.

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History: The Municipal Complex at 780 Fisherman Street is currently provided air conditioning services by multiple small AC roof units that are at the end of their useful lives and are characterized by repeated failures, adversely impacting operations and incurring costly repairs. A more consolidated central system will provide operating efficiencies and improved environmental performance, greatly improved reliability and a significant reduction in repair costs.

The Municipal Complex was financed by the City National Bank in 2015. As of January 1, 2024, there will be a balance outstanding on this Note of $3,744,876. As of June 1, 2025, a final payment (balloon payment) of $3,229,070 will be due. A payment of this amount in FY 25 would adversely impact ongoing operations, making the refinancing of this debt appropriate to avoid this balloon payment.

Ingram Park requires investment to make it one of the premier parks in South Florida. Staff is developing tentative plans to accomplish this objective.

Current Activity: Staff has determined on a very preliminary basis an estimated cost of $1.5 million to fully upgrade the Municipal Complex air conditioning system. Staff estimates that in total a $6.0 million bond would be appropriate with the proceeds to be used as follows:

1. Refinance the current FY 2015 Note financing the Municipal Complex
2. New Municipal Complex air conditioning system
3. Ingram Park improvements

As noted, part of the process of issuing bonds requires engagement of a Bond Counsel. In accordance with the City's Code of Ordinances, Section 2-317 (4) b., legal services are exempt from the requirement for formal competitive bidding.

Financial Impact**:** Bond Counsel issuing fees typically range from $15,000 to $100,000 depending on the complexity. The proposed bond issuance isn't deemed to be very complicated, and the cost is estimated to be at the lower end of this range. This fee will be charged to the Non-Department Professional Services Account (19-519312) with an initial FY 24 budget of $580,000.

Proposed Action:

Staff recommends the City Commission authorize the Interim City Manager to select Greenspoon Marder, P.A. to provide Bond Counsel services for the City's proposed debt financing and provide his recommendation to the City Commission for approval if the total Bond Counsel fee will exceed $25,000.

Attachment:

GreenspoonMarder LLP

Morris G. (Skip) Miller, Esq.
CityPlace Tower, Suite 900
525 Okeechobee Boulevard
West Palm Beach, Florida 33401
Phone: 561.227.2370
Fax: 561.653.3937
Direct Phone: 561.838.4556
Direct Fax: 561.514.3456
Email: Skip.Miller@gmlaw.com

December 4, 2023

SENT VIA E- MAIL TO: dwilliams@opalockafl.gov

Darvin Williams
Interim City Manager
City of Opa Locka
780 Fisherman St., 4th Floor
Opa Locka, Florida 33054

Re: City of Opa Locka Capital Improvement Revenue and Revenue Refunding Notes (the "Notes")

Dear Mr. Williams:

Thank you for your consideration of this firm as bond counsel to the City of Opa Locka (the "City") in connection with the City's issuance of the Notes to finance the costs of infrastructure improvements in the City and the refunding of the City's Capital Improvement Note, Series 2014 (collectively, the "Project"). It is our understanding that the Notes will be secured by one or more sources of the City's legally available non ad valorem revenues. This letter will set forth the basis on which we are prepared to render legal services to the City.

In our capacity as bond counsel, our primary responsibility will be to render an objective legal opinion with respect to the authorization and closing of the Notes. As bond counsel, we will examine applicable law, prepare the appropriate documents authorizing and securing the Notes and other necessary documents, consult with the parties to the transaction prior to the closing of the Notes, review certified proceedings, and undertake such additional duties as we deem necessary to render the opinion.

Assuming completion of the proceedings to our satisfaction, we will render our opinion, subject to customary assumptions and limitations, to the City and the lender of the Loan (the "Lender") to the effect that (a) the resolution authorizing the Notes, any loan agreement between the City and the Lender, and the Notes are valid and binding obligations of the City, enforceable against the City in accordance with their respective terms, and (b) the interest paid on the Notes will be excluded from gross income for federal income tax purposes.

Our opinion of bond counsel will be executed and delivered on the date the Notes are closed and will be based on facts and laws existing as of their date. Upon delivery of such opinions, our responsibilities as bond counsel will be concluded with respect to the Notes.

In rendering our opinion as bond counsel, we will rely upon the certified proceedings and other certifications of public officials and other persons furnished to us without undertaking to verify the same by independent investigation. We will also rely on the opinion of the City Attorney with respect to certain matters relating to the due and valid existence of the City, and its due enactment or adoption of the resolution authorizing the City to issue the Notes. We do not review the financial condition of the City, the feasibility of the Project, or the adequacy of the security provided to the purchasers of the Notes and will express no opinion relating thereto. We also do not prepare a request for proposals or similar document for the City to utilize to select a purchaser for the Notes.

I will be the primary attorney in the firm providing your representation. I will involve other attorneys in the firm to the extent necessary to provide you with proper representation.

In performing services as bond counsel, our client will be the City and we will represent its interests. We assume that other parties to the transaction will retain such counsel as they deem necessary and appropriate to represent their interests in this transaction. Our representation of the City does not alter our responsibility to render an objective opinion of bond counsel.

We invite you to discuss freely with us any questions you may have concerning our understanding relative to fees generally, or to particular fees charged for any particular matter. We wish for our clients to be satisfied with both the quality of our legal services and the reasonableness of the fees we charge for those services. We have found that an engagement letter such as this, which confirms the general scope of the representation and outlines the fee and cost arrangement, assists both the lawyer and the client in dealing with the business side of their relationship, while preserving a good working relationship with respect to the representation of the client.

In connection with the foregoing, we will charge our time at an hourly rate of $460, billed monthly. Said hourly fees will be credited against a flat fee of $30,000, due at closing. The $460 per hour is a 20% discount off of my standard hourly rate. This assumes that the Notes will be privately placed with a lending institution without the use of an offering document. We reserve the right to adjust our fee in the event of a substantial change in (i) the size of the financing, (ii) the structure of the financing, (iii) the schedule of the financing; and (iv) the occurrence of unusual or unforeseen circumstances which require a significant increase in our time or responsibility. In

addition to our fee, we will expect to be reimbursed for all out-of-pocket expenses, including travel costs (exclusive of travel to and from our offices to the City), photocopying, deliveries, long distance telephone charges, filing fees, and other necessary office disbursements. We estimate that such out-of-pocket expenses will not exceed $1,000.

If, for any reason, the Notes do not close, we will not expect to receive compensation from the City in excess of time billed at an hourly rate, other than reimbursement of our actual out-of-pocket costs. In the event the Notes close, our fees for services rendered will be paid at the closing of the Notes, out of Note proceeds.

We have agreed to commence work without a retainer. We reserve the right to require a retainer at any time if, in our sole judgment, that is warranted.

As a matter of professional responsibility, we are required to preserve the confidences and secrets of our client. This professional obligation and the legal privilege for attorney-client communications exist to encourage candid and complete communication between a client and his attorney. We can perform truly beneficial services for you only if we are aware of all information that may be relevant to our representation. Consequently, we trust that our attorney-client relationship with you will be based on mutual confidence and unrestricted communication. Your cooperation is very important. Please keep us informed immediately of any change in contact information and provide full disclosure of all facts to enable us to properly represent you.

You hereby acknowledge that neither our firm nor its representatives have made any guarantees whatsoever regarding the disposition or outcome of any matter for which we have been retained, as all expressions relative thereto are only our opinions. It is expressly understood that either party to this engagement letter may terminate this relationship at any time for any reason, including conflicts of interest that may arise during representation. Any party so terminating shall notify the other party in writing that they are terminating this agreement.

We look forward to working with you. Please let us know if you have any questions.

Sincerely,

GREENSPOON MARDER LLP

By: 

Morris G. (Skip) Miller

We engage Greenspoon Marder LLP as bond counsel to the City of Opa Locka in accordance with the provisions of this letter.

CITY OF OPA LOCKA, FLORIDA

Date: December, _____, 2023

By: _____

Name: _____

Title: _____

Sponsored by: City Manager

RESOLUTION NO. 13-8720

A RESOLUTION OF THE CITY OF OPA-LOCKA, FLORIDA APPROVING AN ENGAGEMENT LETTER FOR BOND COUNSEL SERVICES WITH GREENSPOON MARDER, P.A.; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Opa-Locka, Florida (the "City") is considering the issuance of tax-exempt revenue bonds (the "Series 2013 Bonds") to finance the acquisition of a site in the City and the acquisition, construction, installation and equipping of an administration building and related facilities on such site; and

WHEREAS, Greenspoon Marder, P.A. has submitted to the City an engagement letter pursuant to which it will provide bond counsel services to the City in connection with the Series 2013 Bonds (the "Engagement Letter"); and

WHEREAS, the now City desires to approve the Engagement Letter.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA that:

SECTION 1. The Engagement Letter attached hereto as Exhibit A is hereby approved with fixed Bond Counsel fees payable in the amount of $40,000.00, payable from legally available funds of the city and/or proceeds of the bond. The City Manager and Finance Director of the City are each authorized to execute the acknowledgment of the City set forth within such Engagement Letter.

SECTION 2. This resolution shall be effective immediately upon adoption.

PASSED AND ADOPTED this 26th day of November, 2013.

JOSEPH L. KELLEY
VICE MAYOR

Attest to:

Joanna Flores
City Clerk

Approved as to form and legal sufficiency:

Joseph S. Geller
GREENSPOON MARDER P.A.
City Attorney

9662390.1

Moved by:	COMMISSIONER HOLMES
Seconded by:	COMMISSIONER JOHNSON
Commission Vote:	3-0
Commissioner Holmes:	YES
Commissioner Johnson:	YES
Commissioner Santiago:	NOT PRESENT
Vice-Mayor Kelley:	YES
Mayor Taylor:	NOT PRESENT

City of Opa-Locka
Agenda Cover Memo

Commission Meeting Date:	Nov. 26th, 2013		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**	
				X			
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		
Funding Source: *(Enter Acct No.)* **ITEM BUDGETED:** YES _____ NO _____	*(Enter Fund & Dept)* N/A		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
					X			
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid #:**		N/A			
		X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communcation** ☐		N/A			
Sponsor Name	City Manager		**Department:**		Finance			

Short Title:

A Resolution of the City Commission to approve an Engagement Letter for Bond Counsel Services with Greenspoon Marder, P.A. and authorize the City Manager and Finance Director to execute the Engagement Letter in connection with Series 2013 Bonds.

Staff Summary:

The City of Opa-locka desires to issue Series 2013 Bonds to finance the acquisition of properties in the City for construction, installation and equipping of a new administration building and related facilities on the site.

Greenspoon Marder, P.A. has submitted to the City an Engagement Letter to provide Bond Counsel Services to the City in connection with Series 2013 Bonds for financing the facilities.

Greenspoon Marder, P.A., in their capacity as bond counsel, will primarily be responsible for rendering an objective legal opinion with respect to the authorization and issuance of the Bonds. As bond counsel, they will examine applicable law, prepare the appropriate resolutions and other documents authorizing and securing the Bonds and other necessary documents, including closing documents and certificates, consult with the parties to the transaction prior to the issuance of the bonds, review certified proceedings, and undertake such additional duties as deem necessary to render the opinion.

Assuming completion of the proceedings to their satisfaction, they will render an opinion, subject to customary assumptions and limitations, that:

(i) The City resolution relating to the issuance of the Bonds has been duly adopted by the City and creates a valid pledge of the City's Public Service Tax and Communication Services Tax revenues and constitutes a valid and binding obligation of the City enforceable against the City in accordance with its terms;

(ii) The issuance and sale of the Bonds has been authorized by the City and upon proper execution and authentication, the bonds constitute valid and binding obligations of the City payable in accordance with the terms of the related resolution;

(iii) The interest paid on the Bonds will be excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed upon individuals and corporations.

Greenspoon Marder's opinion as bond counsel will be executed and delivered on the date the Bonds are exchanged for their purchase price and will be based on facts and laws existing as of its date. Upon delivery of such opinion, their responsibilities as bond counsel will be concluded with respect to the Bonds.

Specifically, but without limitation, Greenspoon Marder, P.A. will not undertake (unless separately engaged) to provide continuing advice to the City or any other party concerning any actions necessary to assure that interest paid on the Bonds will continue to be excluded from gross income for federal income tax purposes.

In rendering their opinion as bond counsel, Greenspoon Marder, P.A. will rely upon the certified proceedings and other certifications of public officials and other persons furnished to them without undertaking to verify the same by independent investigations. Greenspoon Marder, P.A. will not review the financial condition of the City, the feasibility of any project to be financed by proceeds of the Bonds, or the adequacy of the security provided to owners thereof and will express no opinion relating thereto.

In performing services as bond counsel, their clients will be the City and they will represent its interests. Greenspoon Marder, P.A. will assume that other parties to the transaction will retain such counsel as they deem necessary and appropriate to represent their interests in any transaction. Greenspoon Marder, P.A.'s representation of the City does not alter their responsibility to render an objective opinion as bond counsel.

Proposed Action:

Staff recommends approval.

Attachment:

Engagement Resolution and Letter.

Memorandum

TO: **Myra L. Taylor, Mayor**
Joseph L. Kelley, Vice Mayor
Timothy Holmes, Commissioner
Dorothy Johnson, Commissioner
Luis B. Santiago, Commissioner

FROM: **Kelvin L. Baker, Sr., City Manager**

DATE: **November 26, 2013**

RE: **A Resolution of the City Commission to approve an Engagement Letter for Bond Counsel Services with Greenspoon Marder, P.A. and authorize the City Manager and Finance Director to execute the Engagement Letter, in connection with Series 2013 Bonds.**

Request:

A Resolution of the City of Opa-locka approving an Engagement Letter for Bond Counsel Services with Greenspoon Marder, P.A. ; and providing an effective date.

Description:

The City of Opa-locka desires to issue Series 2013 Bonds to finance the acquisition of properties in the City for construction, installation and equipping of a new administration building and related facilities on the site.
Greenspoon Marder, P.A. has submitted to the City an Engagement Letter to provide bond counsel services to the City in connection with Series 2013 Bonds for financing the facilities.

Greenpoon Marder, P.A., in their capacity as bond counsel, will primarily be responsible for rendering an objective legal opinion with respect to the authorization and issuance of the Bonds.

As bond counsel, they will examine applicable law, prepare the appropriate resolutions and other documents authorizing and securing the Bonds and
other necessary documents, including closing documents and certificates, consult with the parties to the transaction prior to the issuance of the bonds, review certified proceedings, and undertake such additional duties as we deem necessary to render the opinion.

Assuming completion of the proceedings to their satisfaction, they will render an opinion, subject to customary assumptions and limitations, that:

(i) The City resolution relating to the issuance of the Bonds has been duly adopted by the City and creates a valid pledge of the City's Public Service Tax and Communication Services Tax revenues and constitutes a valid and binding obligation of the City enforceable against the City in accordance with its terms;

(ii) The issuance and sale of the Bonds has been authorized by the City and upon proper execution and authentication, the bonds constitute valid and binding obligations of the City payable in accordance with the terms of the related resolution;

(iii) The interest paid on the Bonds will be excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed upon individuals and corporations.

Greenspoon Marder's opinion as bond counsel will be executed and delivered on the date the Bonds are exchanged for their purchase price and will be based on facts and laws existing as of its date. Upon delivery of such opinion, their responsibilities as bond counsel will be concluded with respect to the Bonds.

Specifically, but without limitation, Greenspoon Marder, P.A will not undertake (unless separately engaged) to provide continuing advice to the City or any other party concerning any actions necessary to assure that interest paid on the Bonds will continue to be excluded from gross income for federal income tax purposes

In rendering their opinions as bond counsel, Greenspoon Marder, P.A. will rely upon the certified proceedings and other certifications of public officials and other persons furnished to them without undertaking to verify the same by independent investigation. Greenspoon Marder, P.A. will not review the financial condition of the City, the feasibility of any project to be financed by proceeds of the Bonds, or the adequacy of the security provided to owners thereof and will express no opinion relating thereto.

In performing services as bond counsel, their clients will be the City and they will represent its interests. Greenspoon Marder, P.A. will assume that other parties to the transaction will retain such counsel as they deem necessary and appropriate to represent their interests in any transaction. Greenspoon Marder, P.A.'s representation of the City does not alter their responsibility to render an objective opinion as bond counsel.

Financial Impact:
This amount comes from account no.44-541821

Implementation Time Line:
Immediately

Legislative History:
None

Staff Recommendation:
Staff recommends approval

Attachment(s)
Draft Engagement Letter Resolution

Prepared By: Susan Gooding-Liburd, Finance Director
Elbert L. Waters, J.D

GreenspoonMarder
ATTORNEYS AT LAW

888.491.1120
www.gmlaw.com

From the desk of:
Denise J. Ganz, Esq.
One Boca Place, Suite 414-E
2255 Glades Road
Boca Raton, Florida 33431
Phone: 561.994.2212
Fax: 561.997.8494
Direct Phone: 954.527.2410
Direct Fax: 954.333.4010
Email: denise.ganz@gmlaw.com

November 22, 2013

VIA E-MAIL
Kelvin Baker, City Manager
City of Opa-locka, Florida
3400 NW 135th Street
Building B
Opa-locka, FL 32907

Re: City of Opa-Locka, Florida Revenue Bonds, Series 2013(the "Bonds")

Dear Mr. Baker:

This will confirm the acknowledgement by the City of Opa-Locka, Florida (the "City") of the retention of this firm to serve as bond counsel in connection with the proposed issuance of the above referenced Bonds. Assuming the Bonds are issued and purchased by a single institutional purchaser in a negotiated private placement, we would charge a fixed bond counsel fee of $40,000, payable from legally available funds of the City and/or proceeds of the Bonds. We would expect that the bond counsel fees will be paid at the time of the successful closing and delivery of the Bonds. Notwithstanding the foregoing, if the Bonds are not issued for any reason on or before December 31, 2013, we would expect to receive payment of the fees actually incurred in connection with the Bonds by this firm and our special tax counsel, McCarter and English, P.A. These fees are in addition to our actual out of pocket expenses incurred in rendering bond counsel services to the City in connection with the Bonds, which we would not expect to exceed $750.

In our capacity as bond counsel, our primary responsibility will be to render an objective legal opinion with respect to the authorization and issuance of the Bonds. As bond counsel, we will examine applicable law, prepare the appropriate resolutions and other documents authorizing and securing the Bonds and other necessary documents, including closing documents and certificates, consult with the parties to the transaction prior to the issuance of the bonds, review certified proceedings, and undertake such additional duties as we deem necessary to render the opinion.

Assuming completion of the proceedings to our satisfaction, we will render our opinion, subject to customary assumptions and limitations, that:

(i) The City resolution relating to the issuance of the Bonds has been duly adopted by the City and creates a valid pledge of the City's Public Service Tax and Communication Services Tax revenues and constitutes a valid and binding obligation of the City enforceable against the City in accordance with its terms;

(ii) The issuance and sale of the Bonds has been authorized by the City and upon proper execution and authentication, the bonds constitute valid and binding obligations of the City payable in accordance with the terms of the related resolution;

(iii) The interest paid on the Bonds will be excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed upon individuals and corporations.

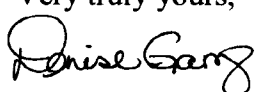
Our opinion as bond counsel will be executed and delivered on the date the Bonds are exchanged for their purchase price and will be based on facts and laws existing as of its date. Upon delivery of such opinion, our responsibilities as bond counsel will be concluded with respect to the Bonds. Specifically, but without limitation, we do not undertake (unless separately engaged) to provide continuing advice to the City, the City or any other party concerning any actions necessary to assure that interest paid on the Bonds will continue to be excluded from gross income for federal income tax purposes

In rendering our opinions as bond counsel we will rely upon the certified proceedings and other certifications of public officials and other persons furnished to us without undertaking to verify the same by independent investigation. We do not review the financial condition of the City, the feasibility of any project to be financed by proceeds of the Bonds, or the adequacy of the security provided to owners thereof and will express no opinion relating thereto.

In performing services as bond counsel, our clients will be the City and we will represent its interests. We assume that other parties to the transaction will retain such counsel as they deem necessary and appropriate to represent their interests in any transaction. Our representation of the City does not alter our responsibility to render an objective opinion as bond counsel.

Please acknowledge the foregoing in the space provided below for that purpose. We appreciate the opportunity to be of assistance to the City.

Very truly yours,



Denise J. Ganz

ACKNOWLEDGED:

CITY OF OPA-LOCKA, FLORIDA

By: _____
Name: _____
Title: _____
Date: _____

Sponsored by: Mayor Taylor

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO TAKE ALL NECESSARY STEPS TO PURCHASE A NEW CITY BUS TO BE UTILIZED FOR THE TRANSPORTATION OF SENIOR CITIZENS; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Opa-Locka City Commission ("City Commission") desires to purchase a new city bus to be utilized for the transportation of senior citizens within the City; and

WHEREAS, the City Commission finds that it is in the best interests of the City and its residents to direct the Interim City Manager to take all necessary steps to purchase a new city bus to be utilized for senior citizens of the City of Opa-Locka.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

SECTION 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

SECTION 2. AUTHORIZATION
The City Commission of the City of Opa-Locka hereby directs the Interim City Manager to take all necessary steps to purchase a new City of Opa-Locka bus to be utilized for senior citizens within the City of Opa-Locka.

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Resolution may be authorized by the Interim City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. EFFECTIVE DATE
This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

John Taylor, Mayor

ATTEST:

Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

DocuSign Envelope ID: 98BDDB0A-F615-4E93-B07C-D6E9565EF481

City of Opa-Locka
Agenda Cover Memo

DocuSigned by:
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City Manager:	Darvin E. Williams		**CM Signature:**					
Commission Meeting Date:	*1/10/2024*	**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**		
			X					
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**		
	X		**Public Hearing:** *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**	
					X		**X**	
Funding Source: *Account#* **:**	*(Enter Fund & Dept)* See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**		
						X		
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:Piggyback**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*				
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐					
Sponsor Name	Mayor Taylor		**Department:**	City Commission				

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the Interim City Manager to procure a new passenger bus to accommodate the City's Seniors Program.

Staff Summary:

The City has a large and active Senior Citizen population. The Seniors Program provides transportation services for the senior community to various locations and activities within and around City limits. It is essential that the City can accommodate the residents with safe and reliable transportation. It is in the best interest of the City for the Interim City Manager to take all necessary steps to procure a new bus for the Seniors Program.

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Financial Impact: The FY 24 Budget includes $150,000 for a possible Seniors Bus with the intent to seek its funding through a potential grant. To date, an appropriate grant hasn't been identified, which will require an alternate source of General Fund funding. The FY 24 General Fund budget is very tight with all available General Fund funding appropriated for various uses. As the year progresses, savings from planned uses may appear which can be used for unanticipated requirements such as this. However, so far this year, these savings have been minimal and have been used to fund other unanticipated requirements. In the absence of the recognition of any meaningful savings currently available to fund this significant expenditure, staff recommends the use of Contingency to fund this item.

Procurement of a passenger bus involves sorting through literally hundreds of options to identify the combination of options best suited to meet the City's needs. This hasn't been done yet due to the extremely limited time available since the request for this item was received. Staff will have to first develop the bus specifications best satisfying City needs. Then either an RFP will be issued or an existing contract suitable for piggyback purposes will be identified. If an RFP is required, this could add up to two months to the process. At such time that the appropriate vehicle has been identified, staff will return to the Commission for authorization to proceed with the procurement and to inform the Commission as to the budget amendment that will be necessary for its funding.

From a very preliminary review of different types of buses and their features, the price could vary from $125,000 to over $200,000 depending on the configuration best meeting City needs. As noted, currently the use of Contingency appears to be the only source of funding immediately available for a procurement of this magnitude.

Proposed Action:

Staff recommends the City Commission approves legislation authorizing the Interim City Manager to develop the configuration of a bus best meeting the needs of the City's Seniors program and then either issue an RFP or identify another agency's competitively-bid bus contract suitable for piggyback purposes, and then return within 90-days for Commission authorization to proceed.

Attachment:

Sponsored by: Mayor Taylor

RESOLUTION 2024-__

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPOINTING MEMBERS TO THE CHARTER REVIEW BOARD; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, City of Opa-Locka Ordinance 2021-14 requires the appointment of members to the City's Charter Review Board for a term of (1) one year from the date of appointment; and

WHEREAS, the work of the last board has completed and the City Commission of the City of Opa-Locka ("City Commission") desires to appoint new members to the Charter Review Board to review any potential Charter changes that may be brought before the City Commission prior to the next election; and

WHEREAS, the Charter Review Board shall consist of (5) resident electors of the City of Opa-Locka appointed by the City Commission (each appointed by one member of the city commission) and two (2) advisory (non-voting) members by a majority vote of the city commission; and

WHEREAS, each board member shall also be a qualified elector of the city with an outstanding reputation for civic pride, interest, integrity, responsibility and business or professional ability; and

WHEREAS, the Charter Review Board may provide recommendations to the City Commission regarding amendments and revisions to the Charter, which may be advisable for placement on the election ballot; and

WHEREAS, the responsibilities of the Charter Review Board shall be consistent with Ordinance 2021-14; and

WHEREAS, this resolution is intended to accomplish the appointment of one person to be selected by each City Commissioner and the appointment of two advisory non-voting members to be selected by the full commission – all appointed during a commission meeting; and

WHEREAS, the City Commission finds that appointment of members to the Charter Review Board is in the best interests of the City of Opa-Locka.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA:

=

Section 1. Adoption of Representations. The foregoing "Whereas" clauses are hereby true and correct and incorporated by reference.

Section 2. Appointment of Members. The City Commission hereby appoints the following members to the Charter Review Board:

(1) _____(Appointed by Mayor Taylor)
(2) _____(Appointed by Vice-Mayor Ervin)
(3) _____(Appointed by Commissioner Bass)
(4) _____(Appointed by Commissioner Kelley)
(5) _____(Appointed by Commissioner Williams)
(6) _____(Full Commission non-voting member)
(7) _____(Full Commission non-voting member)

Section 3. Effective Date**.** This Resolution shall be effective immediately upon its passage and adoption.

PASSED and **ADOPTED** this _____ day January 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

=

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-Locka
Agenda Cover Memo

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City Manager:	Darvin E. Williams		**CM Signature:**					
Commission Meeting Date:	*1/10/2024*	**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**			
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**		
	X		**Public Hearing:** *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**	
				X		X		
Funding Source: *Account#* **:**	*(Enter Fund & Dept)* See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**		
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:Piggyback**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ■ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*				
	X							
Sponsor Name	Mayor Taylor		**Department:**	City Commission				

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the appointment of seven (7) members of the to the charter review board by the majority vote of the City Commission.

Staff Summary:

Ordinance 2021-14 established a charter review board and provides a method of appointment, composition, membership, term , duties and responsibilities. The Charter Review Board is tasked with reviewing the Charter and propose any amendments or revisions. Each member is appointed for a term of one (1) year. The term of the current members has expired and now requires re-appointment. The City Commission shall appoint five (5) residents electors (each appointed by one member of the city commission) and two (2) advisory (non -voting) members by a majority vote.

Financial Impact:

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Proposed Action:

Staff recommends the City Commission approves legislation authorizing the appointment of seven (7) members of the to the charter review board by the majority vote of the City Commission.

Attachment:

Sponsored by: City Commission

ORDINANCE NO. 2021-14

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, ESTABLISHING A CHARTER REVIEW BOARD FOR THE CITY OF OPA-LOCKA, FLORIDA; PROVIDING FOR METHOD OF APPOINTMENT AND COMPOSITION OF THE BOARD; ESTABLISHING MEMBERSHIP, TERM, DUTIES AND RESPONSIBILITIES OF THE BOARD; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR CODIFICATION AND SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Opa-Locka ("City"), by vote of the citizens, adopted a new Charter on November 6, 2012; and

WHEREAS, pursuant to Article III, Section 3.9 of the City Charter "All City boards or agencies existing prior to the adoption of this charter shall be de-authorized subject to reauthorization under the provisions of this charter. The Commission shall establish or terminate such boards and agencies as it may deem advisable from time to time. The boards and agencies shall report to the Commission"; and

WHEREAS, the City of Opa-Locka desires to create a Charter Review Board to review its Charter and propose any amendments or revisions that may be advisable for placement on the ballot.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, THAT:

Section 1: The recitals to the preamble herein are incorporated by reference.

Section 2: Creation of a Charter Review Board. The City Commission of the City of Opa-Locka hereby creates an advisory board to the Commission to be known as the Charter Review Board ("Charter Review Board").

Section 3: Membership, Term, Duties and Responsibilities.

A. Membership. The Charter Review Board shall consist of five (5) resident electors (each appointed by one member of the city commission) and two (2) advisory (non-voting) members appointed by a majority vote of the City Commission. Each Board member so appointed shall be a qualified elector of the city with an outstanding reputation for civic pride, interest, integrity, responsibility and business or professional ability. Advisory Board Members may reside outside of the City.

B. Term. Upon City Commission appointment, the term of each individual member to the Charter Review Board shall commence. Each member so appointed shall be appointed for a term of (1) one year from the date of appointment. The Charter Review Board shall provide its Report and Recommendations to the City Clerk. Any recommended Charter changes shall be prepared for consideration by the City Commission.

C. Duties. The Charter Review Board may provide recommendations to the City Commission regarding amendments and revisions to the Charter, which may be advisable for placement on the election ballot.

D. Responsibilities.

1. The Charter Review Board shall have an organization meeting. The Charter Review Board shall elect a Chair and a Vice Chair from among its membership. The meetings shall be held on the call of the Chair or a majority of its members at a noticed meeting. All meetings shall be open to the public and held in the City Commission Chambers. A majority of members shall constitute a quorum to do business.
2. Notice of all meetings shall be posted at least 48 hours in advance in City Hall and on the City's Website. The City shall provide a written record of each meeting through summary minutes.
3. The meetings shall be conducted governed by Robert's Rules of Order.
4. The Charter Review Board shall make recommendations to the City Commission. No amendments or revisions to the Opa-Locka Charter shall be submitted to the City Commission for consideration unless favorably voted upon by an affirmative vote of a majority of the Board members.

   (a) Any elector of the city who in good faith believes that an amendment should be made to the Charter of the city shall indicate his or her recommendation in writing and shall file the same with the clerk of the city who shall forward a copy of same to each of the members of the charter board and at the next regularly scheduled public meeting of the board, said elector shall be heard and may give evidence concerning his recommendations. The board shall also hear the recommendations of the city commission, the city attorney, the city manager and the city clerk, when presented.

   (b) The board shall make all recommendations to the city commission as to revisions to the Charter within one hundred twenty (120) days from passage of said recommendations.

5. The members shall serve without compensation but sufficient funds shall be provided by the city commission in the annual budget for reasonable

and necessary expenses to be incurred by the board in performance of its duties. The city manager shall provide such administrative and clerical staff as may be necessary in the proper performance of its duties.

Section 4: Effective Date. This Ordinance shall become effective immediately upon adoption.

PASSED FIRST READING this 13th day of October, 2021.

PASSED SECOND READING this 10th day of November, 2021.

Veronica J. Williams, Vice Mayor

ATTEST:

Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: Commissioner Taylor

Seconded by: Commissioner Bass

VOTE:	**3-0**
Commissioner Taylor	YES
Commissioner Bass	YES
Commissioner Davis	YES
Vice-Mayor Williams	ABSENT



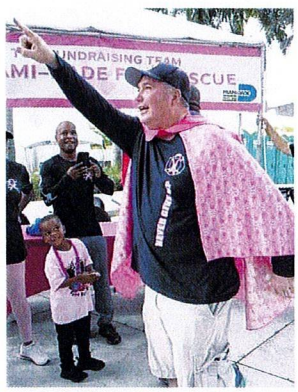
Photos provided by Miami-Dade Fire Rescue

Miami-Dade County elected officials, including Miami-Dade Mayor Daniella Levine Cava, and MDFR personnel along with their families get ready to participate in the annual Making Strides Against Breast Cancer Walk.

MIAMI-DADE COUNTY | AMERICAN CANCER SOCIETY

Making strides against breast cancer

Every October, Miami-Dade County comes together to raise awareness about breast cancer. Since 2007, the county, in partnership with the American Cancer Society, has raised over $2.5 million for breast cancer research. Miami-Dade Fire Rescue has been a part of the drive to help provide information, treatment and support for women with breast cancer. On Saturday, Oct. 23, Fire Chief Alan Cominsky, along with a delegation of sworn and non-sworn personnel, gathered at loanDepot Park to join Miami-Dade County Mayor Daniella Levine-Cava, members of the Board of County Commissioners, and thousands of Miami-Dade residents for the annual Making Strides Against Breast Cancer Walk.



Pink-caped MDFR Fire Chief Alan Cominsky does a superhero pose.



Photos provided by Miami-Dade Fire Rescue

Miami-Dade Fire Rescue BIG PINK Fight for a Cure Fire Truck joins the annual Making Strides Against Breast Cancer Walk.

CITY OF OPA-LOCKA, FLORIDA
NOTICE TO THE PUBLIC

NOTICE IS HEREBY GIVEN that the City Commission of the City of Opa-locka, Florida will hold public hearings at its Regular Commission Meeting on **Wednesday, November 10, 2021 at 7:00 p.m.,** at Sherbondy Village Auditorium, 215 Perviz Avenue, Opa-locka, Florida, to consider final adoption of the following proposed ordinances:

SECOND READING ORDINANCES/PUBLIC HEARINGS:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING A REQUEST FROM AMDI USA, INC. TO CLOSE, VACATE AND ABANDON A PORTION OF NW 130TH STREET BETWEEN NW 30TH AVENUE AND NW 30TH COURT AND A PORTION OF NW 30TH COURT BETWEEN NW 130TH STREET AND NW 131ST STREET FOR THE OPERATION OF A CONCRETE BATCHING PLANT AND FINISHED CONCRETE PRODUCTION COMPANY FACILITY ON THE PROPERTY LOCATED AT 13050 NW 30TH AVENUE AND IDENTIFIED BY FOLIOS 08-2128-002-0020; 08-2128-002-0030; 08-2128-002-0040; 08-2128-002-0050; 08-2128-002-0060; 08-2128-002-0090; 08-2128-004-0380; AND 08-2128-004-0330, IN THE I-2 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE (first reading/public hearing held on September 22, 2021).

AN ORDINANCE OF THE CITY OF OPA-LOCKA, FLORIDA, ESTABLISHING A CHARTER REVIEW BOARD FOR THE CITY OF OPA-LOCKA, FLORIDA; PROVIDING FOR METHOD OF APPOINTMENT AND COMPOSITION OF THE BOARD; ESTABLISHING MEMBERSHIP, TERMS, DUTIES AND RESPONSIBILITIES OF THE BOARD; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR CODIFICATION AND SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE (first reading/public hearing held on October 13, 2021).

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE ANNUAL ADOPTED GENERAL, PROPRIETARY AND SPECIAL REVENUE FUNDS BUDGETS FOR THE FISCAL YEAR COMMENCING OCTOBER 1, 2020 AND ENDING SEPTEMBER 30, 2021, ADJUSTING REVENUES AND EXPENDITURES AS REFLECTED IN EXHIBIT "A"; PROVIDING FOR THE EXPENDITURE OF FUNDS ESTABLISHED BY THE BUDGET; AUTHORIZING THE CITY MANAGER TO TAKE CERTAIN ACTIONS; PROVIDING FOR APPROPRIATION OF ALL BUDGETS AND EXPENDITURES; PROVIDING FOR FEES CONSISTENT WITH APPROPRIATIONS AND AMENDEMENT; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE (first reading/public hearing held on October 27, 2021).

All interested persons are encouraged to participate and will be heard with respect to the public hearing.

Additional information on the above items may be obtained by contacting the Office of the City Clerk by telephone 305-953-2800 or email jflores@opalockafl.gov. To participate or provide comments virtually, please register on the City of Opa-locka website at www.opalockafl.gov no later than 7:00 p.m. on Wednesday, November 10, 2021.

In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodations to participate in the proceeding should contact the Office of the City Clerk at (305) 953-2800 for assistance not later than five (5) days prior to the proceeding. If hearing impaired, you may telephone the Florida Relay Service at (800) 955-8771 (TTY), (800) 955-8770 (Voice), (877) 955-8773 (Spanish) or (877) 955-8707 (Creole).

PURSUANT TO FS 286.0105: *Anyone who desires to appeal any decision made by any board, agency, or commission with respect to any matter considered at such meeting or hearing will need a record of the proceedings, and for that reason, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal may be based.*

Joanna Flores, CMC
City Clerk
City of Opa-locka

Sponsored by: Commissioner Kelley

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, TERMINATING INTERIM CITY MANAGER DARVIN WILLIAMS; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, at a Special City Commission Meeting held on April 5, 2022, the City Commission of the City of Opa-Locka, Florida ("City Commission") voted to appoint Darvin Williams as Interim City Manager to serve for a term not to exceed nine (9) months starting on April 5, 2022, and requiring a national search for the appointment of a permanent City Manager; and

WHEREAS, the City Commission desires to immediately terminate Darvin Williams as Interim City Manager at its City Commission meeting of January 10, 2024, and appoint _____ as the Interim City Manager for a temporary period starting 12:01 AM on January 11, 2024, at a salary compensation of $_____; and

WHEREAS the City Commission is currently engaged in a national search for a permanent City Manager and the passage of this Resolution contemplates that the Interim City Manager shall serve until a national search is completed and a permanent City Manager is selected; and

WHEREAS, the newly appointed Interim City Manager shall have the power to approve purchase orders, execute agreements, sign bank checks and perform all other functions allowable for a City Manager pursuant to City's existing financial policies and code of ordinances; and

WHEREAS, the City Commission finds that it is in the best interests of the City of Opa-Locka to immediately terminate Darvin Williams, who shall be disallowed, barred and otherwise prohibited from further access to the City's computer systems and signing authority of any kind. Further, Darvin Williams shall return, without delay, any and all property belonging to the City of Opa-Locka.

NOW THEREFORE, BE IT RESOLVED THAT THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. Recitals. The recitals to the preamble herein are incorporated by reference.

Section 2. Termination of Interim City Manager Darvin Williams and Appointment of New Interim City Manager. The City Commission of the City of Opa-Locka hereby terminates Darvin Williams as Interim City Manager. Darvin Williams shall be disallowed, barred, and otherwise prohibited from further access to the City's computer systems and signing authority of any kind. Darvin Williams shall return, without delay, any and all property belonging to the City of Opa-Locka. The City Commission hereby appoints _____ as the new Interim City Manager, for a temporary period starting 12:01 AM on January 11, 2024.

Section 3. Scrivener's Errors. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Attorney or designee, without need of public hearing by filing a corrected copy of the same with the City Clerk.

Section 4. Effective Date. This Resolution shall take effect immediately upon passage.

PASSED AND ADOPTED this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

Resolution No. _____

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

_____
Burnadette Norris-Weeks, P.A.

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-locka
Agenda Cover Memo

City Manager:	Darvin Williams			**CM Signature:**	DocuSigned by: C46C07C1E8DE492...		
Commission Meeting Date:	January 10, 2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**
				X			
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**
			Public Hearing: *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex:		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**
							X
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**				
		X					
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐		**Strategic Plan Obj./Strategy:** **(***list the specific objective/strategy this item will address)*		
Sponsor Name	Commissioner Kelley		**Department:**		City Commission		

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the termination of employment of the Interim City Manager, Darvin Williams.

Staff Summary:

It has been proposed to terminate the employment of Darvin Williams as the Interim City Manager of the City of Opa-locka. The City Charter, Section 3.2 indicates "The City Manager may be removed by a majority vote of the Commission provided that at least three affirmative votes shall be required for removal."

Financial Impact – Interim City Manager Williams doesn't have an Employment Agreement with the City and there is no contractual basis for a determination of a financial impact. The City's Employee Handbook is silent in regard to any financial considerations regarding termination of employment.

Proposed Action

Attachment:

Sponsored by: Commissioner Kelley

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS ("RFP") FOR A PUBLIC RELATIONS AND MARKETING CONSULTANT CONSISTENT WITH THE SCOPE OF SERVICES OUTLINED IN EXHIBIT "A", ATTACHED HERETO; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City Commission desires to increase awareness of the City of Opa-locka's ("City") mission and goals, garner public and community support and an understanding of the City's initiatives and programs, as well as be at the forefront of any potential issues that may impact the City; and

WHEREAS, the City desires to work with a professional, full time firm on an as-needed and on-going basis to bring about aforementioned results; and

WHEREAS, the City also desires to work with qualified professionals with experience in creating a unique brand/identity, memorable message development and communication through multiple media formats; and

WHEREAS, the City has determined that issuance of an RFP utilizing the Scope of Services outlined in Exhibit "A" hereto is in the best interests of the City and its residents.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA:

Section 1. Adoption of Representations. The above recitals are true and correct and are incorporated into this Resolution by reference.

Section 2. Approval of Issuance of RFP for a Public Relations and Marketing Consultant. The City Commission of the City of Opa-locka hereby approves the issuance of a Request for Proposals (RFP) for a Public Relations and Marketing Consultant utilizing the Scope of Services outlined in Exhibit "A" attached hereto.

Section 3. Effective Date.
This Resolution shall take effect immediately upon adoption by the City Commission of the City of Opa-locka.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass _____
Commissioner Kelley _____
Commissioner Williams _____
Vice Mayor Ervin _____
Mayor Taylor _____

EXHIBIT "A"

SCOPE OF SERVICES FOR REQUEST FOR PROPOSAL (RFP)
Public Relations and Marketing Consultant

CONTRACTOR AGREES TO:

●Create Marketing Plan to be approved by City within thirty (30) days of contract execution

● Create and deliver to City press releases on behalf of City for placement on social media outlets

● Create and deliver to City press releases targeted for news outlets

● Pitch development initiatives/stories and photo opportunities to news outlets

● Coordinate and schedule interviews with City Mayor where necessary

● Provide crisis management services and prepare draft public statements

● Develop talking points for interviews

● Broadcast interviews live on all Social Media platforms

● Provide an after-action report including all media releases, media clips, high performance social media posts with analytics, log of television and radio appearances

● Develop graphics to visually convey positive facts about the City

● Post helpful information for residents to all social media platforms

● Develop and distribute a newsletter in conjunction with City staff

● Distribute information to City constituents via group texts and telephone calls

- Serve as the Event Coordinator for All City Events

- Provide photographer at City events

- Post photographs on social media that are approved by event sponsoring Commissioner or City Manager if a City sponsored event

- Prepare flyers for Commission sponsored and City sponsored events

As a way to facilitate the aforementioned outcomes, the City agrees to:

a) Work with the _____ staff to identify information to be distributed and disseminated.

b) Provide feedback and approval on all work prior to disseminating to public, press, and constituents.

c) Coordinate access for Mayor and City Commissioners as needed.

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City of Opa-Locka
Agenda Cover Memo

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City Manager:	Darvin E. Williams		**CM Signature:**					
Commission Meeting Date:	*1/10/2024*	**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**			
			X					
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**		
	X		**Public Hearing:** *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**	
					X		**X**	
Funding Source: *Account#* **:**	*(Enter Fund & Dept)* See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**		
						X		
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:Piggyback**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*				
	X							
Sponsor Name	Commissioner Kelley		**Department:**	City Commission				

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the Interim City Manager to issue an RFP for citywide Public Relations Services.

Staff Summary:

On December 13th, 2023, the City Commission voted to terminate the City's contract with Roar Media for Public Relations and Marketing services. The City is now seeking a professional full-time firm to render these services. The firm will be expected to provide a comprehensive and innovative plan that increases awareness and informs the community and/or stakeholders of the City's mission, initiatives, projects, goals and programs. The firm must also demonstrate expertise and remain proactive in identifying and responding to any potential issue that may affect the City. The Interim City Manager shall be authorized to issue an RFP for citywide Public Relations Services to include the Scope of Services.

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Financial Impact: In addition to the electronic distribution of this RFP, staff may choose to advertise in publications to ensure broad awareness of this request for bids for an expenditure not to exceed $3,000. This advertising will be charged to Non-department Other Advertising (19-515491) which currently has $13,059 available.

Proposed Action:

Staff recommends the City Commission approves legislation authorizing the Interim City Manager to issue an RFP for citywide Public Relations Services.

Attachment:

Resolution No. 23-189

Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS ("RFP") FOR QUALIFIED FINANCIAL INSTITUTIONS TO OFFER FINANCING TERMS FOR THE REFINANCING OF CERTAIN CURRENT CITY DEBT AND CERTAIN CAPITAL PROJECTS IN AN RFP FORM TO BE APPROVED BY THE CITY ATTORNEY PRIOR TO ISSUANCE; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, debt financing is recommended by the Interim City Manager as the most appropriate way to meet certain City of Opa-Locka ("City") financial obligations within the next two years; and

WHEREAS, the Interim City Manager recommends that the City Commission authorize the issuance of a Request For Proposal (RFP) for financial institutions to provide debt financing to meet these City requirements; and

WHEREAS, the RFP form shall be prepared by city management, but shall be submitted to the City Attorney for review, comments and approval prior to RFP issuance; and

WHEREAS, the City has determined that authorizing the issuance of an RFP for said services is in the best interest of the City and its residents. The City Commission further authorizes the spending of up to Three Thousand Dollars ($3,000.00) for advertising purposes, if deemed appropriate.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA:

Section 1. Adoption of Representations. The above recitals are true and correct and are incorporated into this Resolution by reference.

Section 2. Approval of Issuance of RFP for Capital Projects Refinancing. The City Commission of the City of Opa-Locka hereby approves the issuance of a Request For Proposal (RFP) for qualified financial institutions to offer financing terms for the refinancing of certain current City debt and for certain capital projects, in an RFP form to be approved by the City

Attorney prior to RFP issuance. The City Commission further authorizes the spending of up to Three Thousand Dollars ($3,000.00) for advertising purposes, if deemed appropriate.

Section 3. Scrivener's Errors.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Resolution may be authorized by the Interim City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

Section 4. Effective Date. This Resolution shall take effect immediately upon adoption by the City Commission of the City of Opa-Locka.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-locka
Agenda Cover Memo

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City Manager:	Darvin Williams		**CM Signature:**					
Commission Meeting Date:		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**		
			X					
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**		
	X		**Public Hearing:** *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**	
					X		**X**	
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**		
						X		
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ▬ **Communication** ☐	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*				
	X							
Sponsor Name	City Manager		**Department:**	City Manager				

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the Interim City Manager to issue a Request For Proposals (RFP) for qualified banking institutions to offer bond financing terms for the replacement of the City's A/C Chiller at the Municipal Complex.

Staff Summary:

The multiple old AC roof units that serves the Municipal Complex have remained in a malfunctioning state for an extended period and may completely fail at any given time. Without an efficient and reliable air conditioning system, daily City operations may be hindered. The City is investigating a centralized roof AC chiller system with an initial estimated cost of $1.5 million, which will require bond financing. The Interim City Manager is

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seeking approval to issue a Request For Proposal (RFP) for qualified banking institutions to offer bond financing terms to replace the current old AC roof units located at the Municipal Complex

Financial Impact:

Proposed Action:

Staff recommends the City Commission authorize the Interim City Manager to issue a Request For Proposal (RFP) for qualified banking institutions to offer bond financing terms to replace the antiquated A/C roof units currently servicing the Municipal Complex with a centralized AC chiller unit.

Attachment:

Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THREE BIDS FOR COMMUNITY ENGAGEMENT SERVICES IN CONNECTION WITH EDUCATING THE PUBLIC ON THE NEED TO REFINANCE A BOND FOR CERTAIN INGRAM PARK IMPROVEMENTS AND FOR AIR CONDITIONING CHILLER REPAIR SERVICES AT THE CITY'S MUNICIPAL COMPLEX; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, it is important that residents remain informed about the City of Opa-Locka's financial health, especially when it pertains to the issuance of revenue bonds; and

WHEREAS, the Interim City Manager recommends that the City Commission finance the cost of infrastructure improvements at Ingram Park and the installation of a new air-conditioning system through refinancing of the current 2015 Note that financed the Municipal Complex; and

WHEREAS, the City Commission desires that the City conduct community engagement so that the public is educated on the need to refinance a bond for certain improvements to Ingram Park and for air conditioning chiller repair services at the City's Municipal Complex; and

WHEREAS, the Interim City Manager recommends that the City Commission authorizes three bids for engagement services to inform the community of the need to refinance a bond and for certain improvements at Ingram Park, as well air conditioning chiller repair services at the City's Municipal Complex; and

WHEREAS, the City Commission of the City of Opa-Locka finds that it is in the best interest of the City and its residents to authorize the Interim City Manager to seek three bids for engagement services to inform the community of the need to refinance a bond for Ingram Park improvements, as well for air conditioning chiller repair services at the City's Municipal Complex.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

SECTION 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

SECTION 2. AUTHORIZATION

The City Commission of the City of Opa-Locka hereby authorizes the Interim City Manager to seek three bids for community engagement services in connection with educating the public on the need to refinance a bond for certain Ingram Park improvements and for air conditioning chiller repair services at the City's Municipal Complex.

SECTION 3. SCRIVENER'S ERRORS.

Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Resolution may be authorized by the Interim City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. EFFECTIVE DATE

This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-locka
Agenda Cover Memo

City Manager:	Darvin Williams		**CM Signature:**	DocuSigned by: C46C07C1E8DE492...				
Commission Meeting Date:		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**		
			X					
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**		
	X		**Public Hearing:** *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**	
					X			
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: See Financial Impact		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**		
						X		
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
		X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐	**Strategic Plan Obj./Strategy:** (*list the specific objective/strategy this item will address)*				
	X							
Sponsor Name	City Manager		**Department:**	City Manager				

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the Interim City Manager to seek three bids for engagement services to inform the community of the refinancing of the bond and its use for the redevelopment of Ingram Park and for the repair of air conditioning chiller services at the city's Municipal Complex.

Staff Summary:

It is important that residents remain informed of the City's financial health, especially when it includes the issuance of revenue bonds. As the City seeks to finance the cost of infrastructure improvements such as Ingram Park, the installation of a new air-conditioning system and to refinance the current 2015 Note financing the Municipal Complex, it imperative to engage the community. The Interim City Manager shall seek three bids for engagement services to inform the residents.

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Financial Impact –

Proposed Action

It is recommended the City Commission of the City of Opa-locka approves legislation authorizing the Interim City Manager to seek three bids for engagement services to inform the community of the refinancing of the bond and its use for the redevelopment of Ingram Park and for the repair of air conditioning chiller services at the city's Municipal Complex.

Attachment:

Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SELECTION OF POPULAR BANK AS AN EXEMPTION TO COMPETITIVE PROCUREMENT; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City has been dissatisfied with the banking services it has been receiving for a considerable period of time. Staff recommends the selection of Popular Bank to provide banking services; and

WHEREAS, as the result of dissatisfaction with the current banking relationship, the Interim City Manager conducted exploratory discussions with other banks, including Popular Bank and recommends the selection of Popular Bank as an exemption from the City's regular competitive procurement process; and

WHEREAS, Popular Bank is rated with a "BBB" rating which denotes good prospects for ongoing viability; and

WHEREAS, the City's Code of Ordinances, Section 2-318, (4)o states: "The foregoing enumeration of services deemed to be exempt from the competitive procurement requirements is not intended to be an exhaustive or exclusive list. The City Manager, or his designee, may determine if a contractual service must be procured through the competitive procurement process, if not expressly indicated above". In light of the urgency to move forward immediately to begin to secure long-term debt financing, the Interim City Manager recommends that this item be approved under this provision of the Code; and

WHEREAS, the City Commission of the City of Opa-Locka finds that it is in the best interest of the City to select Popular Bank to provide banking services.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

SECTION 1. RECITALS ADOPTED.

The recitals to the preamble herein are incorporated by reference.

SECTION 2. AUTHORIZATION

The City Commission of the City of Opa-Locka authorizes the selection of Popular Bank to provide banking services for the City of Opa-Locka as an exemption to a regular procurement process.

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Resolution may be authorized by the Interim City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. EFFECTIVE DATE
This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-locka
Agenda Cover Memo

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City Manager:	Darvin Williams		**CM Signature:**					
Commission Meeting Date:	*1.10.2024*		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		**X**
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☒ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X							
Sponsor Name	City Manager		**Department:**		City Manager			

Short Title:

A resolution of the City Commission of the City of Opa-locka approving the selection of Popular Bank to provide the City's banking services.

Staff Summary:

Issue / Recommendation: The City has received banking services from City National Bank for more than a decade and it is staff's opinion that the current bank is not meeting the expectations of management. Staff recommends the selection of Popular Bank to provide banking services for the City.

Current Activity: As a result of dissatisfaction with its current banking relationship, staff has conducted exploratory discussions with other banks, including Popular Bank, that serve South Florida to better understand what might be available. During the course of these discussions, Popular Bank made it extremely

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clear that they would be interested in having the City as a client and have provided a proposal with very competitive rates for services, significantly increasing interest income to the City for the funds maintained within City accounts

Popular Bank is rated with a "bbb" rating which denotes good prospects for ongoing viability.

Financial Impact: In addition to improved services, the City will now receive in excess of $150,000 per year in interest income on its accounts at the bank. Although the bank is ready and able to assist in the City in arranging long-term debt for its future needs, no specific long-term debt proposal is included in this item.

Proposed Action:

Staff recommends the City Commission authorize the Interim City Manager to enter into an agreement with Popular Bank to provide banking services to the City.

Attachment:

1. Comparative Banking Services

BANKING FEES AND SERVICES COMPARISON

Prepared By:	**J. Bergel**
Date Prepared:	**10/30/2023**
Requester: Inter. City Manager	**Darvin Williams**

CITY OF OPA-LOCKA

Banks		**Popular Bank**	**Banesco**	**City National Bank**
Average Balance		**$ 33,459,100.69**	**$ 33,459,100.69**	**$ 33,459,100.69**
Less Average Deposit Float		- 17,123.50	- 17,123.50	- 17,123.50
Average Collected Balance		**33,441,977.19**	**33,441,977.19**	**33,441,977.19**
Less Reserve Requirement		**0.00%** 0.00	**0.10%** 3,344,197.73	**0.10%** 3,344,197.73
Avail Bal for Earnings Credit		33,441,977.19	30,097,779.46	30,097,779.46
Net Available Balance for Investment		0.00	0.00	0.00
Earnings on Available Balance	**Rate %**	**0.50%** 0.00	0.00	**0.10%** 0.00
Total Charges for Services		1,079.96	1,070.62	1,261.02
Net Charge for Services		0.00	0.00	0.00

SERVICE DESCRIPTION	Volume	Unit Cost	Total Charge for service	Unit Cost	Total Charge for service	Unit Cost	Total Charge for service
Balance and Compensation Information							
Deposit Coverage	33459	$ 0.0108	$ 250.00	$ -	$ -	$ -	$ -
Total			**$ 250.00**		**$ -**		**$ -**
General Account Services							
Account Maintenance	14	$ 10.0000	$ 140.00	$ 19.00	$ 266.00	$ -	$ -
Checks Paid	164	$ 0.1500	$ 24.60	$ 0.20	$ 32.80	$ 0.40	$ 65.60
Deposited Items	300	$ 0.1500	$ 45.00	$ 0.20	$ 60.00	$ 0.40	$ 120.00
Deposits Credit	34	$ 0.1500	$ 5.10	$ -	$ -	$ -	$ -
Transaction Limit	47	$ -	$ -	$ -	$ -	$ 0.75	$ 35.25
Transaction Limit	641	$ -	$ -	$ -	$ -	$ -	$ -
Online Stop Payments	17	$ 15.0000	$ 255.00	$ 25.00	$ 425.00	$ 30.00	$ 510.00
Negative Collected Bal	0	$ 0.0825	$ -	0.00%	$ -	7.25%	$ -
Total			**$ 469.70**		**$ 783.80**		**$ 730.85**
Wire Transfer Services							
Wire Transfer Module	1	$ 15.0000	$ 15.00	$ 15.00	$ 15.00	$ 20.00	$ 20.00
Incoming Domestic Wire Transfer	0	$ 10.0000	$ -	$ 15.00	$ -	$ 15.00	$ -
Incoming International Wire Transfer	0	$ 10.0000	$ -	$ 15.00	$ -	$ 15.00	$ -
Incoming International FX Wire Transfer	0	$ 10.0000	$ -	$ 15.00	$ -	$ 15.00	$ -
Outgoing Domestic Wire Transfer	0	$ 15.0000	$ -	$ 15.00	$ -	$ 15.00	$ -
Outgoing International Wire Transfer	0	$ 15.0000	$ -	$ 15.00	$ -	$ 15.00	$ -
Total			**$ 15.00**		**$ 15.00**		**$ 20.00**
Liquidity Management Services							
ZBA Master Account Monthly Maint	1	$ 25.0000	$ 25.00	$ 30.00	$ 30.00	$ 50.00	$ 50.00
ZBA Sub Account Monthly Maint	1	$ 15.0000	$ 15.00	$ 20.00	$ 20.00	$ 25.00	$ 25.00
Total			**$ 40.00**		**$ 50.00**		**$ 75.00**
Business Online Banking (BOB)							
D1B/Epartner Monthly Maintenance	1	$ 15.0000	$ 15.00	$ -	$ -	$ 35.00	$ 35.00
Additional Accounts	8	$ 5.0000	$ 40.00	$ -	$ -	$ -	$ -
Additional Accounts	12	$ 5.0000	$ 60.00	$ -	$ -	$ 10.00	$ 120.00
Total			**$ 115.00**		**$ -**		**$ 155.00**
ACH Services							
ACH Credits Received	163	$ 0.1500	$ 24.45	$ 0.20	$ 32.60	$ 0.20	$ 32.60
ACH Debits Received	21	$ 0.1500	$ 3.15	$ 0.20	$ 4.20	$ 0.20	$ 4.20
Total			**$ 27.60**		**$ 36.80**		**$ 36.80**
Fraud Mitigation Services							
Positive Pay Per Acct Maint	4	$ 15.0000	$ 60.00	$ 50.00	$ 50.00	$ 25.00	$ 100.00
Positive Pay Module Monthly Fee	1	$ -	$ -	$ 20.00	$ 20.00	$ 20.00	$ 20.00
Positive Pay Checks Uploaded	164	$ 0.0400	$ 6.56	$ -	$ -	$ -	$ -
Positive Pay Per Check Exception	0	$ 1.0000	$ -	$ -	$ -	$ -	$ -
Positive Pay per ACH Exception	0	$ 1.0000	$ -	$ -	$ -	$ -	$ -
Total			**$ 66.56**		**$ 70.00**		**$ 120.00**
Remote Deposit Capture Services							
Office Deposit Monthly Service	1	$ 15.0000	$ 15.00	$ 50.00	$ 50.00	$ 55.00	$ 55.00
Office Deposit Per Item	300	$ 0.0500	$ 15.00	$ -	$ -	$ -	$ -
Total			**$ 30.00**		**$ 50.00**		**$ 55.00**
Cash Vault Services							
Cash Vault Deposit Ticket	40	$ 1.1000	$ 44.00	$ 1.00	$ 40.00	$ 1.10	$ 44.00

Cash Vault Cash Deposit Per 100 - CNB	82	$	-	$	-	$	0.06	$	4.92	$	0.06	$	4.92
Cash Vault Cash Deposit Per 1000 - PB	8	$	0.5000	$	4.10	$	-	$	-	$	-	$	-
Cash Vault Cash Deposit Per 100 - CNB	13	$	-	$	-	$	0.20	$	2.60	$	0.15	$	1.95
Cash Vault Cash Deposit Per 1000 - PB	1	$	0.5000	$	0.50	$	-	$	-	$	-	$	-
Cash Vault Non Standard Coin Deposit	14	$	1.2500	$	17.50	$	1.25	$	17.50	$	1.25	$	17.50
Total				**$**	**66.10**			**$**	**65.02**			**$**	**68.37**
Total Service Fee				**$**	**1,079.96**			**$**	**1,070.62**			**$**	**1,261.02**

Taxable Capital Improvement Revenue Note 2015B				
Amount	$ 6,000,000		$ 5,106,000	N/A
Terms (years)	20.00		30.00	N/A
Refinance Interest Rate	5%	10 year fixed	4.25%	N/A
Loan Fee	0.125%		0%	N/A
Prepayment	0%		0%	N/A
Debt Service Coverage Ratio	1.25		0%	N/A
Idle Funds Rate	0%		2%	N/A

Current Note with City National	
Note Balance as of ***01/01/2024***	$ 3,744,876
Interest Rate	4.25%
Loan Fee	0.00%
Prepayment	0%
Please Note:	
The note matures as of June 1, 2025, with a balloon payment of $3,229,070.	

Please Note: Popular Bank

Terms:

The facility shall require monthly payments of principal and interest based on a 20-year amortization schedule.

The loan maturity date will be ten (10) years from the date of closing. Any outstanding principal and interest balance shall be due and payable at maturity.

Interest:

The interest rate will be fixed at 5.00% for (10) ten years. Interests shall accrue on the basis of a 360-day year and actual days elapsed.

Prepayment:

All the facilities will be subject to a prepayment penalty of 5% on year one, 4% on year two, 3% on year three, 2% on year four and 1% on year five.

Other General Conditions:

Debt Service Coverage Ratio of 1.25X to be always maintained.

Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING EXECUTION FOR THE ENVIRONMENTAL REVIEW EXCEPTION FORM AND OTHER NECESSARY DOCUMENTS RELATED TO THE CANAL PROJECT GRANT REQUEST FOR THE CANAL LOCATED AT NW 127TH STREET; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on January 28, 2022, Governor Ron DeSantis announced, through the Department of Economic Opportunity, the award to the City of Opa-Locka of seven million dollars ($7,000,000.00) for the complete renovation of the 127th Street Canal within the City, including expanding the depth of the canal and stabilizing the bank on both sides to enhance community flood protection; and

WHEREAS, the City Commission desires to authorize the execution of the Environmental Review Exception Form and any other required documentation related to the canal project grant request for the canal located at NW 127th Street for the City of Opa-Locka and the Department of Economic Development Community Development Block Grant Mitigation Program (CDBG-MIT); and

WHEREAS, the City Commission of the City of Opa-Locka finds that it is in the best interests of the City and its residents to authorize execution of the Environmental Review Exception Form and other necessary documents related to the Canal project grant request for the canal located at NW 127th Street.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

SECTION 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

SECTION 2. AUTHORIZATION
The City Commission of the City of Opa-Locka hereby authorizes the Interim City Manager or appropriate management staff to execute the Environmental Review Exception Form and other necessary documents related to the Canal project grant request for the canal located at NW 127th Street.

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Resolution may be

authorized by the Interim City Manager following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. EFFECTIVE DATE
This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-locka
Agenda Cover Memo

Department Manager:	Adelina Gross			**Department Manager Signature:**	DocuSigned by: Adelina Gross EC5929C4FFB9414...			
City Manager:	Darvin Williams			**CM Signature:**	DocuSigned by: C46C07C1E8DE492...			
Commission Meeting Date:	01.10.2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
		X	**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		X
Funding Source: *Account#* **:**	*(Enter Fund & Dept.)* Ex:		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							x	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**		*N/A*			
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** **Bus. & Economic Dev** **Public Safety** **Quality of Education** **Qual. of Life & City Image** **Communication**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X							
Sponsor Name	City Manager		**Department:**		City Manager			

Short Title:

A RESOLUTION OF THE CITY OF OPA-LOCKA, AUTHORIZING THE CITY MANAGER TO SIGN THE ENVIRONMENTAL EXCEPTION AND ALL ADDITIONAL RELATED DOCUMENTATION TO THE NW 127TH STREET CANAL.

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Staff Summary:

On January 28, 2022, Governor Ron de Santis announced through the Department of Economic Opportunity the award to the **City of Opa-Locka ($7,000,000)**- for complete renovation of the 127th Ave Canal, including expanding the depth of the canal and stabilizing the bank on both sides to enhance community flood protection.

This resolution is to authorize the City Manager to execute and sign on behalf of the City the Environmental Exception Form and any other required documentation for the performance related to the grant project of NW 127th Street Canal between the City of Opa-Locka and the Department of Economic Development Community Development Block Grant Mitigation Program (CDBG-MIT)

Financial Impact- No Financial Impact

Proposed Action:

Staff recommends the approval of the item.

Attachment:

1. Community Development Block Grant Mitigation Program (CDBG-MIT) Sub-recipient Agreement.
2. Environmental Exception Form

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State of Florida
Department of Economic Opportunity

Federally Funded
Community Development Block Grant
Mitigation Program (CDBG-MIT)
Subrecipient Agreement

THIS SUBRECIPIENT AGREEMENT is entered into by the State of Florida, Department of Economic Opportunity, (hereinafter referred to as "DEO") and the **City of Opa-Locka** (hereinafter referred to as the "Subrecipient"), each individually a "Party" and collectively "the Parties."

THIS AGREEMENT IS ENTERED INTO BASED ON THE FOLLOWING REPRESENTATIONS:

WHEREAS, pursuant to Public Law (P.L.) P.L. 115-123 Bipartisan Budget Act of 2018 and Additional Supplemental Appropriations for Disaster Relief Act 2018 (approved February 9, 2018), and P.L. 116-20 Supplemental Appropriations for Disaster Relief Requirements Act, 2019 (approved June 6, 2019), Division B, Subdivision 1 of the Bipartisan Budget Act of 2018, P.L. 115-56, the "Continuing Appropriations Act, 2018" ; and the requirements of the Federal Register (FR) notices entitled "Allocations, Common Application, Waivers, and Alternative Requirements for Community Development Block Grant Mitigation Grantees", 84 FR 45838 (August 30, 2019) and "Allocations, Common Application, Waivers, and Alternative Requirements for Community Development Block Grant Disaster Recovery Grantees" (CDBG Mitigation) 86 FR 561 (January 6, 2021);(hereinafter collectively referred to as the "Federal Register Guidance"), the U.S. Department of Housing and Urban Development (hereinafter referred to as "HUD") has awarded Community Development Block Grant–Mitigation (CDBG-MIT) funds to DEO for mitigation activities authorized under Title I of the Housing and Community Development Act of 1974 (HCDA) (42 United States Code (U.S.C.) § 5301 *et seq.*) and applicable implementing regulations at 24 C.F.R. part 570 and consistent with the Appropriations Act.

WHEREAS, CDBG-MIT funds made available for use by the Subrecipient under this Agreement constitute a subaward of the DEO Federal award, the use of which must be in accordance with requirements imposed by Federal statutes, regulations and the terms and conditions of DEO's Federal award.

WHEREAS, the Subrecipient has legal authority to enter into this Agreement and by signing this Agreement, the Subrecipient represents and warrants to DEO that it will comply with all the requirements of the subaward described herein.

WHEREAS, all CDBG-MIT activities carried out by the Subrecipient will: (1) meet the definition of mitigation activities. For the purpose of this funding, mitigation activities are defined as those activities that increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage to and loss of property, and suffering and hardship, by lessening the impact of future disasters; (2) address the current and future risks as identified in DEO's Mitigation Needs Assessment of most impacted and distressed area(s); (3) be CDBG-eligible activities under the HCDA or otherwise eligible pursuant to a waiver or alternative requirement; and (4) meet a national objective, including additional criteria for mitigation activities and a Covered Project.

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NOW THEREFORE, DEO and the Subrecipient agree to the following:

(1) SCOPE OF WORK

The Scope of Work for this Agreement includes Attachment A, Project Description and Deliverables. With respect to Attachment B, Project Budget, and Attachment C, Activity Work Plan, the Subrecipient shall submit to DEO such Attachments in conformity with the current examples attached hereto as necessary and appropriate. Provided further, if there is a disagreement between the Parties, with respect to the formatting and contents of such attachments, then DEO's decisions with respect to same shall prevail, at DEO's sole and absolute discretion.

(2) INCORPORATION OF LAWS, RULES, REGULATIONS AND POLICIES

Subrecipient has diligently reviewed this Agreement and is a sophisticated organization having experience managing projects with funds made available through federal grants. Subrecipient is familiar with DEO's grant agreement with HUD, has reviewed applicable CDBG-MIT regulations and guidelines, will conduct, and will ensure its activities are in compliance with DEO's grant agreement with HUD and all applicable CDBG-MIT regulations and guidelines. Subrecipient agrees to abide by all applicable State and Federal laws, rules and regulations as now in effect and as may be amended from time to time, including but not limited to, the Federal laws and regulations set forth in 24 CFR Part 570, applicable Federal Register Notices, the State's Action Plan, and all applicable CDBG-MIT regulations and guidelines.

Subrecipient shall ensure that all its activities under this Contract shall be conducted in conformance with these provisions, as applicable: 45 CFR Part 75, 29 CFR Part 95, 2 CFR Part 200, 20 CFR Part 601, 24 CFR Part 570 subpart I, *et seq.*, and all other applicable federal laws, regulations, and policies governing the funds provided under this Agreement as now in effect and as may be amended from time to time.

(3) PERIOD OF AGREEMENT

This Agreement is effective as of the date DEO executes this Agreement (the "Effective Date") and ends forty-eight (48) months after execution by DEO, unless otherwise terminated as set forth herein.

(4) RENEWAL AND EXTENSION

This Agreement shall not be renewed. DEO shall not grant any extension of this Agreement unless the Subrecipient provides justification satisfactory to DEO in its sole discretion and DEO's Director of the Division of Community Development approves such extension in writing

(5) MODIFICATION OF AGREEMENT

Modifications to this Agreement shall be valid only when executed in writing by the Parties. Any modification request by the Subrecipient constitutes a request to negotiate the terms of this Agreement. DEO may accept or reject any proposed modification based on DEO's sole determination and absolute discretion, that any such acceptance or rejection is in the State's best interest.

(6) RECORDS

(a) The Subrecipient's performance under this Agreement shall be subject to 2 CFR part 200 – Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards as now in effect and as may be amended from time to time.

(b) Representatives of DEO, the Chief Financial Officer of the State of Florida, the Auditor General of the State of Florida, the Florida Office of Program Policy Analysis and Government Accountability, and representatives of the Federal government and their duly authorized representatives shall have access to any of the Subrecipient's books, documents, papers and records, including electronic storage media, as

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they may relate to this Agreement, for the purposes of conducting audits or examinations or making excerpts or transcriptions.

(c) The Subrecipient shall maintain books, records, and documents in accordance with generally accepted accounting procedures and practices which sufficiently and properly reflect all expenditures of funds provided by DEO under this Agreement.

(d) The Subrecipient will provide to DEO all necessary and appropriate financial and compliance audits in accordance with Paragraph (7), Audit Requirements and Attachments I and J herein and ensure that all related party transactions are disclosed to the auditor.

(e) The Subrecipient shall retain sufficient records to show its compliance with the terms of this Agreement and the compliance of all subrecipients, contractors, subcontractors and consultants paid from funds under this Agreement for a period of six (6) years from the date DEO issues the final closeout for this award. The Subrecipient shall also comply with the provisions of 24 CFR 570.493 and 24 CFR 570.502(a)(7)(ii). The Subrecipient shall further ensure that audit working papers are available upon request for a period of six (6) years from the date DEO issues the final closeout of this Agreement, unless extended in writing by DEO. The six-year period may be extended for the following reasons:

1. Litigation, claim or audit initiated before the six-year period expires or extends beyond the six-year period, in which case the records shall be retained until all litigation, claims or audit findings involving the records have been resolved.

2. Records for the disposition of non-expendable personal property valued at $1,000 or more at the time of acquisition shall be retained for six (6) years after final disposition.

3. Records relating to real property acquired shall be retained for six (6) years after the closing on the transfer of title.

(f) The Subrecipient shall maintain all records and supporting documentation for the Subrecipient and for all contractors, subcontractors and consultants paid from funds provided under this Agreement, including documentation of all program costs in a form sufficient to determine compliance with the requirements and objectives of the scope of work and all other applicable laws and regulations.

(g) The Subrecipient shall either (i) maintain all funds provided under this Agreement in a separate bank account or (ii) ensure that the Subrecipient's accounting system shall have sufficient internal controls to separately track the expenditure of all funds from this Agreement. Provided further, that the only option available for advanced funds is to maintain such advanced funds in a separate bank account. There shall be no commingling of funds provided under this Agreement with any other funds, projects or programs. DEO may, in its sole discretion, disallow costs made with commingled funds and require reimbursement for such costs as described herein, Subparagraph (22)(e), Repayments.

(h) The Subrecipient, including all of its employees or agents, contractors, subcontractors and consultants to be paid from funds provided under this Agreement, shall allow access to its records at reasonable times to representatives of DEO, the Chief Financial Officer of the State of Florida, the Auditor General of the State of Florida, the Florida Office of Program Policy Analysis and Government Accountability or representatives of the Federal government or their duly authorized representatives. "Reasonable" shall ordinarily mean during normal business hours of 8:00 a.m. to 5:00 p.m., local time, Monday through Friday.

(7) AUDIT REQUIREMENTS

(a) The Subrecipient shall conduct a single or program-specific audit in accordance with the provisions of 2 CFR part 200 if it expends seven hundred fifty thousand dollars ($750,000) or more in Federal awards from all sources during its fiscal year.

(b) Within sixty (60) calendar days of the close of Subrecipient's fiscal year, on an annual basis, the Subrecipient shall electronically submit a completed Audit Compliance Certification to audit@deo.myflorida.com, and DEO's grant manager; a blank version of which is attached hereto as Attachment J . The Subrecipient's timely submittal of one completed Audit Compliance Certification for

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each applicable fiscal year will fulfill this requirement within all agreements (e.g., contracts, grants, memorandums of understanding, memorandums of agreement, economic incentive award agreements, etc.) between DEO and the Subrecipient.

(c) In addition to the submission requirements listed in Attachment I, Audit Requirements, the Subrecipient shall send an electronic copy of its audit report to DEO's grant manager for this Agreement by June 30 following the end of each fiscal year in which it had an open CDBG-MIT subgrant.

(d) Subrecipient shall also comply with the Federal Audit Clearinghouse rules and directives, including but not limited to the pertinent Report Submissions provisions of 2 C.F.R 200.512, when such provisions are applicable to this Agreement.

(8) REPORTS

Subrecipient shall provide DEO with all reports and information set forth in Attachment G, Reports. The monthly reports and administrative closeout reports must include the current status and progress of Subrecipient and all subcontractors in completing the work described in the Scope of Work, Attachment A, Project Description and Deliverables, and the expenditure of funds under this Agreement. Within 10 calendar days of a request by DEO, Subrecipient shall provide additional program updates or information. Without limiting any other remedy available to DEO, if all required reports and copies are not sent to DEO or are not completed in a manner acceptable to DEO, payments may be withheld until the reports are completed to DEO's satisfaction. DEO may also take other action as stated in Paragraph (13) Remedies or otherwise allowable by law.

(9) INSPECTIONS AND MONITORING

(a) Subrecipient shall cooperate and comply with DEO, HUD, and auditors with any inspections and will immediately provide access to records and financial statements as deemed necessary by DEO, HUD, and their respective auditors at least in accordance with requirements of 2 CFR part 200 and 24 CFR 570.489.

(b) Subrecipient shall cooperate and comply with monitoring of its activities as deemed necessary by DEO to ensure that the subaward is used for authorized purposes in compliance with federal statutes, regulations, and this Agreement.

(c)Without limiting the actions DEO, HUD, or their respective investigators may take, monitoring procedures will include at a minimum: (1) reviewing financial and performance reports required by DEO; (2) following-up and ensuring Subrecipient takes timely and appropriate action on all deficiencies pertaining to the federal award provided to Subrecipient from DEO as detected through audits, on-site reviews and other means; and (3) issuing a management decision for audit findings pertaining to this Federal award provided to Subrecipient from DEO as required by 2 CFR §200.521.

(d) Corrective Actions: DEO may issue management decisions and may consider taking enforcement actions if noncompliance is detected during audits. DEO may require Subrecipient to take timely and appropriate action on all deficiencies pertaining to the federal award provided to Subrecipient from the pass-through entity as detected through audits, on-site reviews and other means. In response to audit deficiencies or other findings of noncompliance with this agreement, DEO may in its sole discretion and without advance notice, impose additional conditions on the use of the CDBG-MIT funds to ensure future compliance or provide training and technical assistance as needed to correct noncompliance. DEO may also take other action as stated in Paragraph (13) Remedies or otherwise allowable by law.

(10) DUPLICATION OF BENEFITS

Subrecipient shall not carry out any of the activities under this Agreement in a manner that results in a prohibited duplication of benefits as defined by Section 312 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.C. 5155 *et seq.*) and described in Appropriations Acts. Subrecipient must comply with HUD's requirements for duplication of benefits, as described in the Federal Register and

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HUD guidance (including HUD training materials). Subrecipient shall carry out the activities under this Agreement in compliance with DEO's procedures to prevent duplication of benefits. Subrecipient shall sign a Subrogation Agreement (See Attachment M).

(11) LIABILITY

(a) If Subrecipient is a state agency or subdivision, as defined in Section 768.28(2), F.S., pursuant to Section 768.28(19), F.S., neither Party indemnifies nor insures or assumes any liability for the other Party for the other Party's negligence.

(b) Subrecipient assumes sole responsibility for the training and oversight of the parties it deals with or employs to carry out the terms of this Agreement to the extent set forth in Section 768.28, Florida Statutes. Subrecipient shall hold DEO harmless against all claims of whatever nature arises from the work and services performed by third parties under this Agreement. For purposes of this Agreement, Subrecipient agrees that it is not an employee or agent of DEO but is an independent contractor.

(c) Subrecipient agrees to be fully responsible for its negligent or tortious acts or omissions, which result in claims or suits against DEO. Subrecipient agrees to be liable for any damages proximately caused by the acts or omissions to the extent set forth in Section 768.28, F.S. Nothing herein shall be construed as consent by DEO to be sued by third parties in any matter arising out of any agreement, contract or subcontract.

(d) Nothing herein is intended to serve as a waiver of sovereign immunity by DEO or the Subrecipient.

(12) EVENTS OF DEFAULT

If any of the following events occur ("Events of Default"), DEO may, in its sole and absolute discretion, elect to terminate any obligation to make any further payment of funds, exercise any of the remedies available through this Agreement or pursue any remedy at law or in equity, without limitation:

(a) Any warranty or representation made by Subrecipient, in this Agreement or any previous agreement with DEO, is or becomes false or misleading in any respect, or if Subrecipient fails to keep or perform any of the obligations, terms, or covenants in this Agreement or any previous agreement with DEO or HUD, and/or has not cured them in timely fashion and/or is unable or unwilling to meet its obligations under this Agreement and/or as required by statute, rule, or regulation;

(b) Any material adverse change occurs in the financial condition of Subrecipient at any time during the term of this Agreement and the Subrecipient fails to cure this adverse change within thirty (30) calendar days from the date written notice is sent by DEO;

(c) If Subrecipient fails to submit any required report or submits any required report with incorrect, incomplete, or insufficient information or fails to submit additional information as requested by DEO;

(d) If Subrecipient fails to perform or timely complete any of its obligations under this Agreement, including participating in DEO's Implementation Workshop. The Parties agree that in the event DEO elects to make payments or partial payments after any Events of Default, it does so without waiving the right to exercise any remedies allowable herein or at law and without becoming liable to make any further payment.

(e) Neither Party shall be liable to the other for any delay or failure to perform under this Agreement if such delay or failure is neither the fault nor the negligence of the Party or its employees or agents and the delay is due directly to acts of God, wars, acts of public enemies, strikes, fires, floods, or other similar cause wholly beyond the Party's control or for any of the foregoing that affects subcontractors or suppliers if no alternate source of supply is available. However, in the event of delay from the foregoing causes, the Party shall take all reasonable measures to mitigate any and all resulting delay or disruption in the Party's performance obligation under this Agreement. If the delay is excusable under this paragraph, the delay will

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not result in any additional charge or cost under the Agreement to either Party. In the case of any delay the Subrecipient believes is excusable under this paragraph, Subrecipient shall notify DEO in writing of the delay or potential delay and describe the cause of the delay either: (1) within ten (10) calendar days after the cause that creates or will create the delay first arose, if Subrecipient could reasonably foresee that a delay could occur as a result or (2) within five (5) calendar days after the date Subrecipient first had reason to believe that a delay could result, if the delay is not reasonably foreseeable. **THE FOREGOING SHALL CONSTITUTE SUBRECIPIENT'S SOLE REMEDY OR EXCUSE WITH RESPECT TO DELAY**. Providing notice in strict accordance with this paragraph is a condition precedent to such remedy. DEO, in its sole discretion, will determine if the delay is excusable under this paragraph and will notify Subrecipient of its decision in writing. No claim for damages, other than an extension of time, shall be asserted against DEO. Subrecipient shall not be entitled to an increase in the Agreement price or payment of any kind from DEO for direct, indirect, consequential, impact or other costs, expenses or damages, including but not limited to costs of acceleration or inefficiency arising because of delay, disruption, interference or hindrance from any cause whatsoever. If performance is suspended or delayed, in whole or in part, due to any of the causes described in this paragraph, after the causes have ceased to exist, Subrecipient shall perform at no increased cost, unless DEO determines, in its sole discretion, that the delay will significantly impair the value of the Agreement to DEO or the State, in which case, DEO may do any or all of the following: (1) accept allocated performance or deliveries from Subrecipient, provided that Subrecipient grants preferential treatment to DEO with respect to products or services subjected to allocation; (2) purchase from other sources (without recourse to and by Subrecipient for the related costs and expenses) to replace all or part of the products or services that are the subject of the delay, which purchases may be deducted from the Agreement quantity or (3) terminate the Agreement in whole or in part.

(13) REMEDIES

If an Event of Default occurs, DEO may in its sole discretion and without limiting any other right or remedy available, provide thirty (30) calendar days written notice to the Subrecipient and if the Subrecipient fails to cure within those thirty (30) calendar days DEO may choose to exercise one or more of the following remedies, either concurrently or consecutively:

(a) Terminate this Agreement upon written notice by DEO sent in conformity with Paragraph (17) Notice and Contact;

(b) Begin any appropriate legal or equitable action to enforce performance of this Agreement;

(c) Withhold or suspend payment of all or any part of a request for payment;

(d) Demand Subrecipient return to DEO any funds used for ineligible activities or unallowable costs under this Agreement or any applicable law, rule or regulation governing the use of the funds; and

(e) Exercise any corrective or remedial actions, including but not limited to:

1. Request additional information from the Subrecipient to determine the reasons for or the extent of non-compliance or lack of performance;

2. Issue a written warning to advise that more serious measures may be taken if the situation is not corrected; and/or

3. Advise the Subrecipient to suspend, discontinue or refrain from incurring costs for any activities in question.

(f) Exercise any other rights or remedies which may be otherwise available under law.

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Pursuit of any of the above remedies does not preclude DEO from pursuing any other remedies in this Agreement or provided at law or in equity. Failure to exercise any right or remedy in this Agreement or failure by DEO to require strict performance does not affect, extend or waive any other right or remedy available or affect the later exercise of the same right or remedy by DEO for any other default by the Subrecipient.

(14) DISPUTE RESOLUTION

DEO shall decide disputes concerning the performance of the Agreement, and document dispute decisions in writing and serve a copy of same to Subrecipient. All decisions are final and conclusive unless the Subrecipient files a petition for administrative hearing with DEO within twenty-one (21) days from the date of receipt of the decision. Exhaustion of administrative remedies prescribed in Chapter 120, F.S., is an absolute condition precedent to Subrecipient's ability to pursue any other form of dispute resolution; provided however, that the Parties may mutually agree to employ the alternative dispute resolution procedures outlined in Chapter 120, F.S.

(15) Citizen Complaints. The goal of DEO is to provide an opportunity to resolve citizen complaints in a timely manner, usually within fifteen (15) business days of the receipt of the complaint as expected by HUD, if practicable, and to provide the right to participate in the process and appeal a decision when there is reason for an applicant to believe its application was not handled according to program policies. All applications, guidelines and websites will include details on the right to file a complaint or appeal and the process for filing a complaint or beginning an appeal.

The Subrecipient will handle citizen complaints by:

(a) Conducting investigations, as necessary;
(b) Finding a resolution; or
(c) Conducting follow-up actions.

Program Appeals

Applicants may appeal program decisions related to one of the following activities:

(a) A program eligibility determination;
(b) A program assistance award calculation; or
(c) A program decision concerning housing unit damage and the resulting program outcome.

Citizens may file a written complaint or appeal with the Office of Long-Term Resiliency by email at CDBG-DR@deo.myflorida.com or by mail to the following address:

Attention: Office of Long-Term Resiliency
Florida Department of Economic Opportunity
107 East Madison Street
The Caldwell Building, MSC 420
Tallahassee, Florida 32399

HUD Complaints

If the complainant is not satisfied by the Subrecipient's determination or DEO's response, then the complainant may file a written appeal by following the instructions issued in the letter of response. If the complainant has not been satisfied with the response at the conclusion of the complaint or appeals process, a formal complaint may then be addressed directly to the regional Department of Housing and Urban Development (HUD) at:

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Department of Housing & Urban Development
Charles E. Bennet Federal Building
400 West Bay Street, Suite 1015
Jacksonville, FL 32202

Fair Housing Complaints

The Florida Office of Long-Term Resiliency operates in Accordance with the Federal Fair Housing Law (The Fair Housing Amendments Act of 1988). Anyone who feels he or she has been discriminated against may file a complaint of housing discrimination: 1-800-669-9777 (Toll Free), 1-800-927-9275 (TTY) or www.hud.gov/fairhousing.

(16) TERMINATION

(a) DEO may immediately suspend or terminate this Agreement for cause by providing written notice, from the date notice is sent by DEO. Cause includes, but is not limited to: an Event of Default as set forth in this Agreement; Subrecipient's improper or ineffective use of funds provided under this Agreement; fraud; lack of compliance with any applicable rules, regulations, statutes, executive orders, HUD guidelines, policies, directives or laws; failure, for any reason, to timely and/or properly perform any of the Subrecipient's obligations under this Agreement; submission of reports that are incorrect or incomplete in any material respect and refusal to permit public access to any document, paper, letter or other material subject to disclosure under law, including Chapter 119, F.S., as amended. The aforementioned reasons for termination are listed in the immediately preceding sentence for illustration purposes but are not limiting DEO's sole and absolute discretion with respect to DEO's right to terminate this Agreement. In the event of suspension or termination, Subrecipient shall not be entitled to recover any cancellation charges or unreimbursed costs.

(b) DEO may unilaterally terminate this Agreement, in whole or in part, for convenience by providing Subrecipient fourteen (14) days written notice from the date notice is sent by DEO, setting forth the reasons for such termination, the effective date and, in the case of partial termination, the portion to be terminated. However, if in the case of partial termination, DEO determines that the remaining portion of the award will not accomplish the purpose for which the award was made, DEO may terminate the portion of the award which will not accomplish the purpose for which the award was made. Subrecipient shall continue to perform any work not terminated. In the event of termination for convenience, Subrecipient shall not be entitled to recover any cancellation charges or unreimbursed costs for the terminated portion of work.

(c) The Parties may terminate this Agreement for their mutual convenience in writing, in the manner agreed upon by the Parties, which must include the effective date of the termination.

(d) In the event that this Agreement is terminated, Subrecipient shall not incur new obligations under the terminated portion of the Agreement after the date Subrecipient has received the notification of termination. Subrecipient shall cancel as many outstanding obligations as possible. DEO shall disallow all costs incurred after Subrecipient's receipt of the termination notice. DEO may, to the extent authorized by law, withhold payments to Subrecipient for the purpose of set-off until the exact amount of damages due to DEO from Subrecipient is determined.

(e) Upon expiration or termination of this Agreement, Subrecipient shall transfer to DEO any CDBG-MIT funds on hand at the time of expiration or termination and any accounts receivable attributable to the use of CDBG-MIT funds.

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(f) Any real property under Subrecipient's control that was acquired or improved in whole or in part with CDBG-MIT funds (including CDBG-MIT funds provided to the subrecipient in the form of a loan) in excess of $25,000 must either:

1. Be used to meet a national objective until five years after expiration or termination of this Agreement, unless otherwise agreed upon by the Parties, or except as otherwise set forth herein; or

2. If not used to meet a national objective, Subrecipient shall pay to DEO an amount equal to the current market value of the property less any portion of the value attributable to expenditures of non-CDBG-MIT funds for the acquisition or improvement of the property for five years after expiration or termination of this Agreement.

(g) The rights and remedies under this clause are in addition to any other rights or remedies provided by law or under this Agreement.

(17) NOTICE AND CONTACT

(a) All notices provided under or pursuant to this Agreement shall be in writing, either by hand delivery, first class or certified mail with return receipt requested, email with confirmation of receipt of email from Subrecipient, to the representative identified below at the address set forth below or said notification attached to the original of this Agreement.

(b) The name and address of DEO's Grant Manager for this Agreement is:

Jorge Passalacqua
107 E Madison Street
Tallahassee, FL 32399
850-921-3278
Jorge.Passalacqua@deo.myflorida.com

(c) The name and address of the Local Government Project Contact for this Agreement is:

Veronica Williams
780 Fisherman Street
Opa-locka, FL 33054
305-928-2868 x1003
VWilliams@opalockafl.gov

(d) If different representatives or addresses are designated by either Party after execution of this Agreement, notice of the name, title and address of the new representative will be provided as provided for in this Agreement. Such change shall not require a formal amendment of the Agreement.

(18) CONTRACTS

If the Subrecipient contracts any of the work required under this Agreement, a copy of the proposed contract template and any proposed amendments, extensions, revisions, or other changes thereto, must be forwarded to the DEO grant manager for prior written approval. For each contract, the Subrecipient shall report to DEO as to whether that contractor or any subcontractors hired by the contractor, is a minority vendor, as defined in Section 288.703, F.S. The Subrecipient shall comply with the procurement standards in 2 CFR §200.318 - §200.327and §200.330 when procuring property and services under this Agreement (refer to Attachments D & E).

The Subrecipient shall include the following terms and conditions in any contract pertaining to the work required under this Agreement:

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(a) the period of performance or date of completion;
(b) the performance requirements;
(c) that the contractor is bound by the terms of this Agreement;
(d) that the contractor is bound by all applicable State and Federal laws, rules, and regulations;
(e) that the contractor shall hold DEO and Subrecipient harmless against all claims of whatever nature arising out of the contractor's performance of work under this Agreement;
(f) the obligation of the Subrecipient to document in Subrecipient's reports the contractor's progress in performing its work under this Agreement;
(g) the requirements of 2 CFR Appendix II to Part 200 – Contract Provision for Non-Federal Entity Contract Under Federal Awards – (refer to Attachment L)

Subrecipient must comply with CDBG regulations regarding debarred or suspended entities (24 CFR 570.489(l)), pursuant to which CDBG funds must not be provided to excluded or disqualified persons and provisions addressing bid, payment, performance bonds, if applicable, and liquidated damages.

Subrecipient shall maintain oversight of all activities performed under this Agreement and shall ensure that its contractors perform according to the terms and conditions of the procured contracts or agreements and the terms and conditions of this Agreement.

(19) TERMS AND CONDITIONS

This Agreement contains all the terms and conditions agreed upon by the Parties. There are no provisions, terms, conditions, or obligations other than those contained in this Agreement; and this Agreement supersedes all previous understandings. No waiver by DEO may be effective unless made is writing by an authorized DEO official.

(20) ATTACHMENTS

(a) If any inconsistencies or conflict between the language of this Agreement and the attachments arise, the language of the attachments shall control, but only to the extent of the conflict or inconsistency.

(b) This Agreement contains the following attachments:

Attachment A – Project Description and Deliverables
Attachment B – Project Budget (Example)
Attachment C – Activity Work Plan (Example)
Attachment D – Program and Special Conditions
Attachment E – State and Federal Statutes, Regulations and Policies
Attachment F – Civil Rights Compliance
Attachment G – Reports
Attachment H – Warranties and Representations
Attachment I – Audit Requirements and Exhibit 1 to Attachment I – Funding Sources
Attachment J – Audit Compliance Certification
Attachment K – SERA Access Authorization Form (form provided after execution of this agreement)
Attachment L – 2 CFR Appendix II to Part 200
Attachment M – Subrogation Agreement

(21) FUNDING/CONSIDERATION

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(a) The funding for this Agreement shall not exceed **Seven Million Dollars and Zero Cents ($7,000,000.00)** subject to the availability of funds. The State of Florida and DEO's performance and obligation to pay under this Agreement is contingent upon annual appropriations by the Legislature and subject to any modification in accordance with Chapter 216, F.S. or the Florida Constitution.

(b) DEO will provide funds to Subrecipient by issuing a Notice of Subgrant Award/Fund Availability ("NFA") through DEO's financial management information system. Each NFA may contain specific terms, conditions, assurances, restrictions or other instructions applicable to the funds provided by the NFA. By accepting funds made available through an NFA, Subrecipient agrees to comply with all terms, conditions, assurances, restrictions or other instructions listed in the NFA.

(c) By execution of this Agreement, Subrecipient certifies that necessary written administrative procedures, processes and fiscal controls are in place for the operation of its CDBG-MIT program for which Subrecipient receives funding from DEO. These written administrative procedures, processes and fiscal controls must, at minimum, comply with applicable state and federal law, rules, regulations, guidance and the terms of this Agreement. Subrecipient agrees to comply with all the terms and conditions of Attachment D, Program and Special Conditions.

(d) Subrecipient shall expend funds only for allowable costs and eligible activities, in accordance with the Scope of Work.

(e) Subrecipient shall request all funds in the manner prescribed by DEO. The authorized signatory for the Subrecipient set forth on the SERA Access Authorization Form must approve the submission of each Request for Funds ("RFF") on behalf of Subrecipient. SERA Access Authorization Form will be provided after the execution of this Agreement.

(f) Except as set forth herein, or unless otherwise authorized in writing by DEO, costs incurred for eligible activities or allowable costs prior to the effective date of this Agreement are ineligible for funding with CDBG-MIT funds.

(g) If the necessary funds are not available to fund this Agreement as a result of action by the United States Congress, the Federal Office of Management and Budget, the Florida Legislature, the State Chief Financial Officer or under Subparagraph (23), Mandated Conditions of this Agreement, all obligations on the part of DEO to make any further payment of funds will terminate and the Subrecipient shall submit its administrative closeout report and subgrant agreement closeout package as directed by DEO within thirty (30) calendar days from receipt of notice from DEO.

(h) Subrecipient is ultimately responsible for the administration of this Agreement, including monitoring and oversight of any person or entity retained or hired by Subrecipient.

(i) All expenditures under this Agreement shall be made in accordance with this Agreement and any applicable state or federal statutes, rules, or regulations.

(j) Funding for this Agreement is appropriated under Public Law 115-254, Division I, the "Supplemental Appropriations for Disaster Relief Act, 2018" and Public Law 116-20, the "Additional Supplemental Appropriations for Disaster Relief Act, 2019" for the purpose of assisting in long-term recovery from major disasters that occurred in 2017, 2018, and 2019 in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 et seq., (the "Stafford Act").

(k) CDBG-DR funds, appropriated and identified by Public Law, are governed by one or more Federal Register notices that contain requirements, applicable waivers, and alternative requirements that apply to the use of these funds.

(22) REPAYMENTS

(a) Subrecipient shall only expend funding under this Agreement for allowable costs resulting from obligations incurred during the Agreement period. Subrecipient shall ensure that its contractors, subcontractors, and consultants only expend funding under this Agreement for allowable costs resulting from obligations incurred during the Agreement period.

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(b) In accordance with Section 215.971, F.S., Subrecipient shall refund to DEO any unobligated funds which have been advanced or paid.

(c) Subrecipient shall refund to DEO any funds paid in excess of the amount to which the Subrecipient or its contractors, subcontractors or consultants are entitled under the terms and conditions of this Agreement.

(d) Subrecipient shall refund to DEO any funds received for an activity if the activity does not meet one of the three National Objectives listed in 24 CFR § 570.483(b), (c) and (d); provided, however, the Subrecipient is not required to repay funds for subgrant administration unless DEO, in its sole discretion, determines Subrecipient is at fault for the ineligibility of the activity in question.

(e) Subrecipient shall refund to DEO any funds not spent in accordance with the conditions of this Agreement or applicable law. Such reimbursement shall be sent to DEO, by the Subrecipient, within thirty (30) calendar days from Subrecipient's receipt of notification of such non-compliance.

(f) In accordance with Section 215.34(2), F.S., if a check or other draft is returned to DEO for collection, the Subrecipient shall pay to DEO a service fee of $15.00 or five percent of the face amount of the returned check or draft, whichever is greater. All refunds or repayments to be made to DEO under this Agreement are to be made payable to the order of "Department of Economic Opportunity" and mailed directly to DEO at the following address:

Department of Economic Opportunity
Community Development Block Grant Programs Cashier
107 East Madison Street – MSC 420
Tallahassee, Florida 32399-6508

(23) MANDATED CONDITIONS

(a) The validity of this Agreement is subject to the truth and accuracy of all the information, representations and materials submitted or provided by the Subrecipient in this Agreement, in any later submission or response to a DEO request or in any submission or response to fulfill the requirements of this Agreement. All of said information, representations and materials are incorporated herein by reference.

(b) This Agreement shall be construed under the laws of the State of Florida and venue for any actions arising out of this Agreement shall be in the Circuit Court of Leon County. The Parties explicitly waive any right to jury trial.

(c) If any provision of this Agreement is in conflict with any applicable statute or rule, or is unenforceable, then that provision shall be null and void only to the extent of the conflict or unenforceability, and that provision shall be severable from and shall not invalidate any other provision of this Agreement.

(d) Any power of approval or disapproval granted to DEO under the terms of this Agreement shall survive the term of this Agreement.

(e) This Agreement may be executed in any number of counterparts, any one of which may be taken as an original.

(f) Subrecipient shall comply with all applicable local, state and federal laws, including the Americans With Disabilities Act of 1990, as amended (P.L. 101-336, 42 U.S.C § 12101 *et seq.*); the Florida Civil Rights Act, as amended, Chapter 760, Florida Statutes; Title VII of the Civil Rights Act of 1964, as amended; and laws which prohibit discrimination by public and private entities on in employment, public accommodations, transportation, state and local government services and telecommunications.

(g) Pursuant to Section 287.133(2)(a), F.S., a person or affiliate, as defined in Section 287.133(1), F.S., who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public

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building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor or consultant under a contract with any public entity; and may not transact business with any public entity in excess of thirty-five thousand dollars ($35,000) for a period of thirty-six (36) months following the date of being placed on the convicted vendor list. By executing this Agreement, the Subrecipient represents and warrants that neither it nor any of its affiliates is currently on the convicted vendor list. The Subrecipient shall disclose if it or any of its affiliates is placed on the convicted vendor list.

(h) Pursuant to Section 287.134(2)(a), F.S., an entity or affiliate, as defined in Section 287.134(1), who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor or consultant under a contract with any public entity; and may not transact business with any public entity. By executing this Agreement, the Subrecipient represents and warrants that neither it nor any of its affiliates is currently on the discriminatory vendor list. The Subrecipient shall disclose if it or any of its affiliates is placed on the discriminatory vendor list.

(i) All bills for fees or other compensation for services or expenses shall be submitted in detail sufficient for a proper pre-audit and post-audit thereof.

(j) In the event travel is pre-approved by DEO, any bills for travel expenses shall be submitted and reimbursed in accordance with Section 112.061, F.S., the rules promulgated thereunder and 2 CFR § 200.474.

(k) If Subrecipient is allowed to temporarily invest any advances of funds under this Agreement, any interest income shall either be returned to DEO or be applied against DEO's obligation to pay the Agreement award amount.

(l) Subrecipient acknowledges being subject to Florida's Government in the Sunshine Law (Section 286.011, F.S.) with respect to the meetings of Subrecipient's governing board or the meetings of any subcommittee making recommendations to the governing board. Subrecipient agrees that all such aforementioned meetings shall be publicly noticed, open to the public and the minutes of all the meetings shall be public records made available to the public in accordance with Chapter 119, F.S.

(m) Subrecipient shall comply with section 519 of P. L. 101-144, the Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1990; and section 906 of P.L. 101-625, the Cranston-Gonzalez National Affordable Housing Act, 1990, by having, or adopting within ninety (90) days of execution of this Agreement, and enforcing, the following:

1. A policy prohibiting the use of excessive force by law enforcement agencies within its jurisdiction against any individuals engaged in non-violent civil rights demonstrations; and

2. A policy of enforcing applicable State and local laws against physically barring entrance to or exit from a facility or location which is the subject of such non-violent civil rights demonstrations within its jurisdiction.

(n) Upon expiration or termination of this Agreement, Subrecipient shall transfer to DEO any CDBG-MIT funds remaining at the time of expiration or termination, and any accounts receivable attributable to the use of CDBG-MIT funds.

(24) LOBBYING PROHIBITION

(a) No funds or other resources received from DEO under this Agreement may be used directly or indirectly to influence legislation or any other official action by the Florida Legislature or any state agency.

(b) The Subrecipient certifies, by its signature to this Agreement, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of

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Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any general loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any federal contract, grant, loan or cooperative agreement;

2. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the Subrecipient shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions; and

3. Subrecipient shall require that this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose as described in this Agreement. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than ten thousand dollars ($10,000) and not more than one hundred thousand dollars ($100,000) for each such failure.

(25) COPYRIGHT, PATENT AND TRADEMARK

Any and all patent rights accruing under or in connection with the performance of this Agreement are hereby reserved to the State of Florida. Any and all copyrights accruing under or in connection with the performance of this Agreement are hereby transferred by Subrecipient to the State of Florida.

(a) If the Subrecipient has a pre-existing patent or copyright, Subrecipient shall retain all rights and entitlements to that pre-existing patent or copyright unless this Agreement expressly provides otherwise.

(b) If any discovery or invention is developed in the course of or as a result of work or services performed under this Agreement or in any way connected with it, Subrecipient shall refer the discovery or invention to DEO for a determination whether the State of Florida will seek patent protection in its name. Any patent rights accruing under or in connection with the performance of this Agreement are reserved to the State of Florida. If any books, manuals, films or other copyrightable material are produced, Subrecipient shall notify DEO. Any copyrights accruing under or in connection with the performance under this Agreement are transferred by the Subrecipient to the State of Florida.

(c) Within thirty (30) calendar days of execution of this Agreement, Subrecipient shall disclose all intellectual properties relating to the performance of this Agreement which give rise to a patent or copyright. Subrecipient shall retain all rights and entitlements to any pre-existing intellectual property which is so disclosed. Failure to disclose will indicate that no such property exists, and DEO shall have the right to all patents and copyrights which accrue during performance of this Agreement.

(26) LEGAL AUTHORIZATION

(a) Subrecipient certifies that it has the legal authority to receive the funds under this Agreement and that its governing body has authorized the execution and acceptance of this Agreement. Subrecipient certifies that the undersigned person has the authority to legally execute and bind the Subrecipient to the terms of this Agreement. DEO may, at its discretion, request documentation evidencing the undersigned has authority to bind Subrecipient to this Agreement as of the date of execution; any such documentation is incorporated herein by reference.

(b) Prior to the execution of this Agreement, Subrecipient warrants that, to the best of its knowledge, there is no pending or threatened action, proceeding, investigation or any other legal or financial condition that would in any way prohibit, restrain or diminish Subrecipient's ability to satisfy its obligations.

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Subrecipient shall immediately notify DEO in writing if its ability to perform is compromised in any manner during the term of this Agreement.

(27) PUBLIC RECORD RESPONSIBILITIES

(a) In addition to Subrecipient's responsibility to directly respond to each request it receives for records, in conjunction with this Agreement and to provide the applicable public records in response to such request, Subrecipient shall notify DEO of the receipt and content of all such requests by sending an email to PRRequest@deo.myflorida.com within one (1) business day from receipt of the request.

(b) Subrecipient shall keep and maintain public records required by DEO to perform the Subrecipient's responsibilities hereunder. Subrecipient shall, upon request from DEO's custodian of public records, provide DEO with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided by Chapter 119, F.S., or as otherwise provided by law. Subrecipient shall allow public access to all documents, papers, letters or other materials made or received by the Subrecipient in conjunction with this Agreement, unless the records are exempt from Article I, Section 24(a) of the Florida Constitution and Section 119.07(1), F.S. For records made or received by Subrecipient in conjunction with this Agreement, Subrecipient shall respond to requests to inspect or copy such records in accordance with Chapter 119, F.S. For all such requests for records that are public records, as public records are defined in Section 119.011, F.S., Subrecipient shall be responsible for providing such public records per the cost structure provided in Chapter 119, F.S., and in accordance with all other requirements of Chapter 119, F.S., or as otherwise provided by law.

(c) This Agreement may be terminated by DEO for refusal by Subrecipient to comply with Florida's public records laws or to allow public access to any public record made or received by the Subrecipient in conjunction with this Agreement.

(d) If, for purposes of this Agreement, Subrecipient is a "contractor" as defined in Section 119.0701(1)(a), F.S. ("Subrecipient-contractor"), the Subrecipient-contractor shall transfer to DEO, at no cost to DEO, all public records upon completion including termination, of this Agreement or keep and maintain public records required by DEO to perform the service. If Subrecipient-contractor transfers all public records to the public agency upon completion of this Agreement, Subrecipient-contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If Subrecipient-contractor keeps and maintains public records upon completion of the Agreement, the Subrecipient-contractor shall meet all applicable requirements for retaining public records in accordance with Chapters 119 and 257, F.S. All records stored electronically must be provided to DEO, upon request from DEO's custodian of public records, in a format that is compatible with the information technology systems of DEO.

(e) If DEO does not possess a record requested through a public records request, DEO shall notify Subrecipient-contractor of the request as soon as practicable, and the Subrecipient-contractor must provide the records to DEO or allow the records to be inspected or copied within a reasonable time, but in all cases within fourteen business days. If the Subrecipient-contractor does not comply with DEO's request for records, DEO shall enforce the provisions set forth in this Agreement. Subrecipient-contractor who fails to provide public records to DEO within a reasonable time may be subject to penalties under Section 119.10, F.S.

(f) Subrecipient shall notify DEO verbally within twenty-four (24) hours and in writing within seventy-two (72) hours if any data in the Subrecipient's possession related to this Agreement is subpoenaed or improperly used, copied or removed (except in the ordinary course of business) by anyone except an authorized representative of DEO. Subrecipient shall cooperate with DEO, in taking all steps as DEO deems advisable, to prevent misuse, regain possession or otherwise protect the State's rights and the data subject's privacy.

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(g) Subrecipient acknowledges DEO is subject to the provisions of Chapter 119, F.S., relating to public records and that reports, invoices and other documents Subrecipient submits to DEO under this Agreement constitute public records under Florida Statutes. Subrecipient shall cooperate with DEO regarding DEO's efforts to comply with the requirements of Chapter 119, F.S.

(h) If Subrecipient submits records to DEO that are confidential and exempt from public disclosure as trade secrets or proprietary confidential business information, such records should be identified as such by Subrecipient prior to submittal to DEO. Failure to identify the legal basis for each exemption from the requirements of Chapter 119, F.S., prior to submittal of the record to DEO serves as the Subrecipient's waiver of a claim of exemption. Subrecipient shall ensure public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of this Agreement term and following completion of this Agreement if the Subrecipient-contractor does not transfer the records to DEO upon completion, including termination, of this Agreement.

(i) **IF SUBRECIPIENT-CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE SUBRECIPIENT-CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS by telephone at 850-245-7140, via email at PRRequest@deo.myflorida.com, or by mail at Department of Economic Opportunity, Public Records Coordinator, 107 East Madison Street, Caldwell Building, Tallahassee, Florida 32399-4128.**

(j) To the extent allowable by law, Subrecipient shall be fully liable for the actions of its agents, employees, partners, contractors and subcontractors and shall fully indemnify, defend, and hold harmless the State and DEO, and their officers, agents and employees, from suits, actions, damages, and costs of every name and description, including attorneys' fees, arising from or relating to public record requests or public record law violation(s), alleged to be caused in whole or in part by the Subrecipient, its agents, employees, partners, contractors or subcontractors, provided, however, Subrecipient does not indemnify for that portion of any costs or damages proximately caused by the negligent act or omission of the State or DEO. DEO, in its sole discretion, has the right, but not the obligation, to enforce this indemnification provision.

(k) DEO does not endorse any Subrecipient, commodity, or service. Subject to Chapter 119, F.S., Subrecipient shall not publicly disseminate any information concerning this Agreement without prior written approval from DEO, including, but not limited to, mentioning this Agreement in a press release or other promotional material, identifying DEO or the State as a reference, or otherwise linking Subrecipient's name and either a description of the Agreement or the name of DEO or the State in any material published, either in print or electronically, to any other entity that is not a Party to this Agreement, except potential or actual employees, agents, representatives or subcontractors with the professional skills necessary to perform the work services required by the Agreement.

(l) Subrecipient shall comply with the requirements set forth in Section 119.0701, F.S., when entering into any public agency contract for services after the Effective Date of this Agreement. Subrecipient shall amend each of the Subrecipient's public agency contracts for services already in effect as of the Effective Date of this Agreement and which contract will or may be funded in whole or in part with any public funds. DEO may terminate this Agreement if the Subrecipient does not comply with this provision.

(28) EMPLOYMENT ELIGIBILITY VERIFICATION

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(a) Section 448.095, F.S., requires the following:

1. Every public employer, contractor, and subcontractor shall register with and use the E-Verify system to verify the work authorization status of all newly hired employees. A public employer, contractor, or subcontractor may not enter into a contract unless each party to the contract registers with and uses the E-Verify system.

2. A private employer shall, after making an offer of employment which has been accepted by a person, verify such person's employment eligibility. A private employer is not required to verify the employment eligibility of a continuing employee hired before January 1, 2021. However, if a person is a contract employee retained by a private employer, the private employer must verify the employee's employment eligibility upon the renewal or extension of his or her contract.

(b) E-Verify is an Internet-based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of all new employees hired to work in the United States. There is no charge to employers to use E-Verify. The Department of Homeland Security's E-Verify system can be found at:

https://www.e-verify.gov/

(c) If the Recipient does not use E-Verify, the Recipient shall enroll in the E-Verify system prior to hiring any new employee or retaining any contract employee after the effective date of this Agreement.

(29) PROGRAM INCOME

(a) The Subrecipient shall report to DEO all program income (as defined at 24 CFR § 570.500(a) or in the Federal Register Guidance governing the CDBG-MIT funds) generated by activities carried out with CDBG-MIT funds made available under this Agreement as part of the Subrecipient's Quarterly Progress Report. The Subrecipient shall use program income in accordance with the applicable requirements of 2 CFR part 200, 24 CFR part 570.489, 570.500, 570.504 and the terms of this Agreement.

(b) Program income generated after closeout shall be returned to DEO. Program income generated prior to closeout shall be returned to DEO unless the program income is used to fund additional units of CDBG-MIT activities, specified in a modification to this Agreement and duly executed prior to administrative closeout.

(30) NATIONAL OBJECTIVES

All activities funded with CDBG-MIT funds must meet the criteria for one of the CDBG program's National Objectives. The Subrecipient certifies that the activities carried out under this Agreement shall meet the following national objectives and satisfy the following criteria:

(a) Benefit low- and moderate- income persons;
(b) Meet a particularly urgent need;
(c) Aid in the prevention or elimination of slums or blight.

(31) INDEPENDENT CONTRACTOR

(a) In Subrecipient's performance of its duties and responsibilities under this Agreement, it is mutually understood and agreed Subrecipient is at all times acting and performing as an independent contractor. Nothing in this Agreement is intended to or shall be deemed to constitute an employer/employee relationship, partnership or joint venture between the Parties. Subrecipient shall at all times remain an independent contractor with respect to the services to be performed under this Agreement. Nothing in this Agreement shall be construed to create any agency or employment

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relationship between DEO Subrecipient, its employees, subcontractors or agents. Neither Party shall have any right, power or authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other.

(b) Subrecipient, its officers, agents, employees, subcontractors or assignees, in performance of this Agreement shall act in the capacity of an independent contractor and not as an officer, employee, agent, joint venturer, or partner of the State of Florida.

(c) Subrecipient shall have sole right to control the manner, method and means by which the services required by this Agreement are performed. DEO shall not be responsible to hire, supervise or pay Subrecipient's employees. Neither Subrecipient, nor its officers, agents, employees, subcontractors or assignees are entitled to State retirement or State leave benefits, or to any other compensation of State employment as a result of performing the duties and obligations of this Agreement.

(d) Subrecipient agrees to take such actions as may be necessary to ensure that each subcontractor will be deemed to be an independent contractor and will not be considered or permitted to be an agent, employee, servant, joint venturer or partner of the State of Florida.

(e) Unless justified by the Subrecipient, and agreed to by DEO in the Scope of Work, DEO will not furnish services of support (*e.g.*, office space, office supplies, telephone service, secretarial or clerical support) to the Subrecipient or its subcontractor or assignee.

(f) DEO shall not be responsible for withholding taxes with respect to the Subrecipient's use of funds under this Agreement. Subrecipient shall have no claim against DEO for vacation pay, sick leave, retirement benefits, social security, workers' compensation, health or disability benefits, reemployment assistance benefits or employee benefits of any kind. Subrecipient shall ensure that its employees, subcontractors and other agents, receive benefits and necessary insurance (health, workers' compensation, reemployment assistance benefits) from an employer other than the State of Florida.

(g) Subrecipient, at all times during the Agreement, must comply with the reporting and Reemployment Assistance contribution payment requirements of Chapter 443, F.S.

(h) DEO shall not be responsible for providing any training to Subrecipient, its employees, assigns, agents, representatives or subcontractors in the professional skills necessary to perform the work services required by this Agreement; DEO may provide training in the form of an Implementation Workshop in keeping with implementation

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State of Florida

Department of Economic Opportunity
Federally Funded Subrecipient Agreement
Signature Page

IN WITNESS THEREOF, and in consideration of the mutual covenants set forth above and, in the attachments and exhibits hereto, the Parties executed this Agreement by their duly authorized undersigned officials.

CITY OF OPA-LOCKA, FLORIDA		**DEPARTMENT OF ECONOMIC OPPORTUNITY**	
By	Signature	**By**	DocuSigned by: 8D7A4D05416240F... Signature
	Veronica Williams		**Dane Eagle**
Title	**Mayor**	**Title**	**Secretary**
Date	12/06/2022	**Date**	12/14/2022
Federal Tax ID #	**85-8012740151C-0**		
UEI #	**YFKCKZNKEVG3**		

Approved as to form and legal sufficiency, subject only to full and proper execution by the Parties.

OFFICE OF GENERAL COUNSEL
DEPARTMENT OF ECONOMIC OPPORTUNITY

By: DocuSigned by: AA5D1E9D97684B4...

Approved Date: 12/12/2022

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Attachment A – Project Description and Deliverables

1. PROGRAM DESCRIPTION: In April 2018, the U.S. Department of Housing and Urban Development (HUD) announced the State of Florida, Department of Economic Opportunity (DEO) would receive $633,485,000 in funding to support long-term mitigation efforts following declared disasters in 2016 and 2017 through HUD's Community Development Block Grant Mitigation (CDBG-MIT) program. Awards were distributed on a competitive basis targeting HUD designated Most Impacted and Distressed (MID) Areas, primarily addressing the Benefits to Low-to-Moderate Income (LMI) National Objective. Additional information may be found in the Federal Register, Vol. 84, No. 169.

The Florida Department of Economic Opportunity (DEO) has apportioned the Federal Award to include the following initiatives: Critical Facility Hardening Program $75,000,000; General Planning Support Program $20,000,000; General Infrastructure Program $475,000,000; and State Planning and Administration $63,485,000.

This award has been granted under the **General Infrastructure Program**. Projects eligible for, but not limited to, funding under this program are infrastructure investments related to the following:

1. Restoration of critical infrastructure
2. Re-nourishment of protective coastal dune systems and state beaches
3. Building or fortifying buildings that are essential to the health, safety and welfare of a community
4. Rehabilitation or construction of stormwater management systems
5. Improvements to drainage facilities
6. Reconstruction of lift stations and sewage treatment plants
7. Road repair and improvement and bridge strengthening

2. PROJECT DESCRIPTION: The City of Opa-Locka, Florida has been awarded Seven Million Dollars and Zero Cents ($7,000,000.00) in CDBG-MIT (Community Block Grant – Mitigation) funding for a Community Flood Protection project involving the 127th Ave. canal, which is approximately 0.6 miles long, is located in the C-7 Canal Basin, and flows west to east discharging into the Spur Canal. The project will consist of canal dredging and restoration to reduce flood risk for the surrounding area. Canal will be stabilized by using a stacked canal bank stabilization (CBS) system.

3. SUBRECIPIENT RESPONSIBILITIES:

A. Complete and submit to DEO within thirty (30) days of Agreement execution a staffing plan which must be reviewed and approved by the DEO Grant Manager prior to implementation. Should any changes to the staffing plan be deemed necessary, an updated plan must be submitted to DEO for review and approval. The Staffing plan must include the following:
   1. Organizational Chart; and
   2. Job descriptions for Subrecipient's employees, contracted staff, vendors, and contractors.

B. Develop and submit a copy of the following policies and procedures to the DEO Grant Manager for review and approval within thirty (30) days of Agreement execution. The DEO Grant Manager will provide approval in writing prior to the policies and procedures being implemented.
   1. Procurement policies and procedures that incorporate 2 CFR Part 200.317-327.
   2. Administrative financial management policies, which must comply with all applicable HUD CDBG-MIT and State of Florida rules.
   3. Quality assurance and quality control system policies and procedures that comply with all applicable HUD CDBG-MIT and DEO policies.

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4. Policies and procedures to detect and prevent fraud, waste and abuse that describe how the Subrecipient will verify the accuracy of applicant information, monitoring policy indicating how and why monitoring is conducted, the frequency of monitoring policy, and which items will be monitored, and procedures for referring instances of fraud, waste and abuse to HUD OIG Fraud Hotline (phone: 1-800-347-3735 or email hotline@hudoig.gov).
5. Policies and procedures for the requirements under 2 CFR 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Award.

C. Attend fraud related training offered by HUD OIG to assist in the proper management of the CDBG-MIT grant funds when available.
D. Upload required documents into a system of record provided by DEO.
E. Complete and submit an updated Project Detail Budget (Attachment B) for review and approval by DEO no later than thirty (30) days after Agreement execution. Any changes to the Project Detail Budget must be submitted in the monthly report submitted to DEO for review and approval by the DEO Grant Manager.
F. Maintain organized Subrecipient agreement files and make them accessible to DEO or its representatives upon request.
G. Comply with all terms and conditions of the Subrecipient Agreement, Infrastructure Program Guidelines, Action Plans, Action Plan amendments, and Federal, State, and local laws.
H. Provide copies of all proposed procurement documents to DEO ten (10) days prior to posting as detailed in Attachment D of Subrecipient Agreement. The proposed procurement documents will be reviewed and approved by DEO Grant Manager. Should the procurement documents require revisions based on state or federal requirements, Subrecipient will be required to postpone procurement and submit revised documents for review and approval.
I. Complete procurement of all applicants for internal grants management and compliance and direct program and product production, including:
    1. Selection of applicants, subrecipients and/or staff that will be responsible for managing applicant intake and related operations, compliance, finance, and administration.
    2. Selection of applicants, subrecipients and/or staff that will be responsible for appraisal, environmental review, title services and legal services.
    3. Copies of all contracts that will be executed by Subrecipient. Contracts must be provided to DEO prior to execution as detailed in Attachment D. Any contract executed by Subrecipient must follow the terms and conditions set forth in this Agreement. Should the submitted contract require necessary additions and/or changes, DEO's Contract Manager will contact Subrecipient regarding changes. Subrecipient is required to submit the updated contract within thirty (30) days. Should the contract not be submitted in a timely manner, Subrecipient will be required to complete the selection process once more.
J. Ensure all projects seeking assistance under the current CDBG-MIT funds, and any future funds allocated for Mitigation, provided by DEO, receive the required Environmental Clearance from DEO prior to Subrecipient being able to commit CDBG-MIT funds.
K. Provide the following documentation to DEO within ten (10) calendars after the end of each month:
    1. A revised detail report measuring the actual cost versus the project cost.
    2. An updated Attachment C which documents any changes to the project progress along with justification for the revision.
L. Develop and submit to DEO a monthly revised detailed timeline for implementation consistent with the milestones outlined in the Mitigation Program Guidelines and report actual progress against the projected progress ten (10) calendar days after the end of each month.
M. Provide the following information on a quarterly basis within ten (10) calendar days of the end of each quarter:
    1. Submit updated organization chart on a quarterly basis with quarterly report.

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2. If staffing changes, there must be s submittal stating the names, job descriptions, on the monthly report deadline.
3. A progress report documenting the following information:
   a. Accomplishments within the past quarter.
   b. Issues or risks that have been faced with resolutions; and
   c. Projected activities to be completed within the following quarter.

N. Subrecipient shall adhere to the deadlines for the project as agreed upon in the Attachment C – Activity Work Plan. If Subrecipient is unable to meet a deadline within thirty (30) calendar days of the due date, Subrecipient shall request an extension of such deadline from DEO in writing at least thirty (30) business days prior to the deadline. Deadlines shall not be extended outside of the term of this Agreement except by a formal amendment executed in accordance with Section (5) Modification of Agreement.

O. Close out report will be no later than sixty (60) calendar days after this Agreement ends or is otherwise terminated.

4. ELIGIBLE TASKS AND DELIVERABLES:

A. Deliverable 1 – Project Implementation

Subrecipient shall:

1. Perform grant management activities to include invoicing, record keeping, preparing and awarding bid to vendor, and financial oversight.
2. Perform Data and Document Management; create and submit all required Semi-Annual reports, Quarterly reports, and other required reports, as well as maintain project files and financial records related to project activities.
3. Ensure compliance to Section 3, Davis-Bacon Labor Standards, and Fair Housing activities.
4. Conduct Environmental review administrative activities (Environmental Exemption, Public Notice Publication(s), etc.).

B. Deliverable 2 – Engineering and Design

Subrecipient shall:

1. Submit a copy of the final design solicitation package, the awarded submittal package, award documentation, contract documentation for the awarded design firm and project delivery schedule at kickoff.
2. Submit a full design package, signed, and sealed by a professional engineer licensed in Florida, including, but not limited to, engineering drawings, specifications, construction cost estimate, surveys, and any other reports, documents, or information relevant to the design showing extent of project reporting at 20%, 40%, 60%, 80% design and final.

C. Deliverable 3 – Construction

Subrecipient shall:

1. Perform clearing and preparation of land including recovery of easement, tree/shrub removal, and any additional necessary removals of construction impediments.
2. Perform dredging of canal, bringing depth to 11ft and width to 30ft.

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3. Perform proper disposal of riverbed pollutants and contaminants in accordance with the Solid Waste Disposal Act and the Federal Water Pollution Control Act.
4. Perform stacked Canal Bank Stabilization (CBS) system on both sides of the canal for the entire length to include grading and sodding.

5. DEO RESPONSIBILITIES:

A. Monitor the ongoing activities of Subrecipient to ensure all activities are being performed in accordance with the Agreement to the extent required by law or deemed necessary be DEO in its discretion
B. Assign a Grant Manager as a point of contact for Subrecipient
C. Review Subrecipient's invoices described herein and process them on a timely basis
D. DEO shall monitor progress, review reports, conduct site visits, as DEO determines necessary at DEO's sole and absolute discretion, and process payments to Subrecipient

6. DELIVERABLES:

Subrecipient agrees to provide the following services as specified:

Deliverable No. 1 - Program Implementation		
Tasks	**Minimum Level of Service**	**Financial Consequences**
Subrecipient shall complete tasks as detailed in Section 4.A. of this Scope of Work.	Subrecipient may request reimbursement upon completion of task listed in 4.A of this Scope of Work as evidenced by submittal of the following documentation: 1) Completed Environmental Review Record 2) Payroll documentation 3) Invoice package in accordance with Section 7 of this scope of Work	Failure to complete the Minimum performance measures as specified shall result in non-payment for this deliverable.
		Deliverable No. 1 Cost: $250,000.00
Deliverable No. 2 – Engineering and Design		
Tasks	**Minimum Level of Service**	**Financial Consequences**
Subrecipient shall complete tasks as detailed in Section 4.B. of this Scope of Work.	Subrecipient may request reimbursement upon completion of task listed in 4.B of this Scope of Work as evidenced by submittal of the following documentation: 1) Copy of all bidding documents 2) Copy of all services contracts 3) Staff payroll documentation 4) Policy memorandum documenting compliance V.C.2 under 84 FR 45838. 5) Updated SOW, budget, and timeline for the project.	Failure to complete the Minimum Level of Service as specified shall result in non-payment for this deliverable.

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	6) Invoice package in accordance with Section 7 of this Scope of Work.	
		Deliverable No. 2 Cost: $700,000.00
Deliverable No. 3 – Construction		
Tasks	**Minimum Level of Service**	**Financial Consequences**
Subrecipient shall complete tasks as detailed in Section 4.C. of this Scope of Work.	Subrecipient may request reimbursement upon completion of task listed in 4.C of this Scope of Work, or upon completion of construction at the 10%, 15%, 25%, 40%, 60%, 75%, 90% and closeout milestones. All reimbursement requests must be evidenced by submittal of the following documentation: 1) AIA forms G702, G703 or their substantive equivalent, certifying that the project, or a quantifiable portion of the project is complete. 2) Photographs of the completed project, or progress made. 3) Invoice package in accordance with Section 7 of this Scope of Work	Failure to complete the Minimum Level of Service as specified shall result in non-payment for this deliverable.
		Deliverable No. 3 Cost: $6,050,000.00
		Total Project Cost Not to Exceed: $7,000,000.00

COST SHIFTING: The deliverable amounts specified within the Deliverables Section 5 table above are established based on the Parties' estimation of sufficient delivery of services fulfilling grant purposes under the Agreement in order to designate payment points during the Agreement Period; however, this is not intended to restrict DEO's ability to approve and reimburse allowable costs Subrecipient incurred providing the deliverables herein. Prior written approval from DEO's Grant Manager is required for changes to the above Deliverable amounts that do not exceed **10%** of each deliverable total funding amount. Changes that exceed **10%** of each deliverable total funding amount will require a formal written amendment request from Subrecipient, as described in **MODIFICATION** section of the Agreement. Regardless, in no event shall DEO reimburse costs of more than the total amount of this Agreement.

7. INVOICE SUBMITTAL

DEO shall reimburse Subrecipient in accordance with Section 5, above. In accordance with the Funding Requirements of s. 215.971(1), F.S. and Section 21 of this Agreement, Subrecipient and its subcontractors may only expend funding under this Agreement for allowable costs resulting from obligations incurred during this Agreement. To be eligible for reimbursement, costs must be in compliance with laws, rules and regulations applicable to expenditures of State funds, including, but not limited to, the Reference Guide for State Expenditures.(https://myfloridacfo.com/docs-sf/accounting-and-auditing-libraries/state-agencies/referenceguideforstateexpenditures4a8dd8e7f6fd4eaeb3eb12363d341f74.pdf?sfvrsn=ae70963d_2).

A. Subrecipient shall provide one (1) invoice for services rendered during the applicable period of time as defined in the deliverable table. In any month no deliverable has been completed, the subrecipient will provide notice that no invoicing will be submitted.

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B. The following documents shall be submitted with the itemized invoice:
   1. A cover letter signed by Subrecipient's Grant Manager certifying that the costs being claimed in the invoice package: (1) are specifically for the project represented to the State in the budget appropriation; (2) are for one or more of the components as stated in Section 5, DELIVERABLES, of this Attachment A; (3) have been paid; and (4) were incurred during this Agreement.
   2. Subrecipient's invoices shall include the date, period in which work was performed, amount of reimbursement, and work completed to date;
   3. A certification by a licensed professional using AIA forms G702 and G703, or their substantive equivalents, certifying that the project, or a quantifiable portion of the project, is complete.
   4. Photographs of the project in progress and completed work;
   5. A copy of all supporting documentation for vendor payments;
   6. A copy of the bank statement that includes the cancelled check or evidence of electronic funds transfer. The State may require any other information from Subrecipient that the State deems necessary to verify that the services have been rendered under this Agreement.

C. Subrecipient's invoice and all documentation necessary to support payment requests must be submitted into DEO's Subrecipient Enterprise Resource Application (SERA). Further instruction on SERA invoicing and reporting, along with a copy of the invoice template, will be provided upon execution of the Agreement.

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Attachment B – Project Budget (Example)

Subrecipient: _____ Contract Number: _____ Modification Number: _____

Activity/Project		National Objective			Beneficiaries					Budget			
Activity	**Description**	**LMI**	**Slum & Blight**	**Urgent Need**	**VLI**	**LI**	**MI**	**Non-LMI**	**Total**	**CDBG-MIT Amount**	**Other Funds**	**Source***	**Total Funds**
1. Housing Program - Homeowner Service Project *(Example Activities)*													
	Home Repair												
	Reconstruction												
	Replacement of Manufactured Homes												
	Temporary Rental and Mortgage Assistance												
	Buyout / Acquisition for Redevelopment												

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2. Housing Program - Supportive Housing Initiative PUD Rental Housing Project *(Example Activities)*													
3. Public Facilities Program – Unified Service Center *(Example Activities)*													
4. Infrastructure Program *(Example Activities)*													
	Armstrong Drainage Project												
	Hastings Phase I Sewer												

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	Hastings Phase II Sewer												
	Oyster Creek Basin Improvements												
	Orange Street Drainage												
	Avenue D Drainage												
	St. Augustine - Lake Maria Sanchez HMGP Match Drainage												
	St. Augustine Blvd & Cypress Rd Drainage												
5.	**Administration**												
6.	**Planning**												
								Totals:					

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***Show the sources and amounts of Other Funds needed to complete the project below, including local funds, grants from other agencies and program income.**

Source of Other Funds	Amount
1.	
2.	
3.	
4.	

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Attachment C – Activity Work Plan (Example)

Subrecipient _____ Activity: _____ Project Budget: _____

Contract Number: _____ Date Prepared: _____ Modification Number: _____

Start Date (month /year)	**End Date** (month /year)	**Describe Proposed Action**	**Activity**	**Description**	**Deliverable**	**Associated Task**	**CDBG-MIT Funding**	**Local/Match Funding**	**Estimated Funds by End Date**

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1. The Subrecipient shall demonstrate that progress is being made in completing project activities in a timely fashion pursuant to the activity work plan. If the Subrecipient does not comply with the activity work plan schedule, a justification for the delay and a plan for timely accomplishment shall be submitted to DEO within 21 calendar days of receiving DEO's request for justification for the delay. Any project for which the Subrecipient has not completed the activities listed in the Activity Work Plan may be rescinded unless DEO agrees that the Subrecipient has provided adequate justification for the delay.

2. The Subrecipient shall maintain records of expenditure of funds from all sources that will allow accurate and ready comparison between the expenditures and the budget/activity line items as defined in the Project Budget and Activity Work Plan.

3. The Subrecipient shall request DEO's approval for all professional services contracts and/or agreements that will be reimbursed with CDBG-MIT funds. Copies of the following procurement documents must be provided to DEO for review:

   a. When publication of a Request for Proposal (RFP) is used as a means of solicitation, a copy of the advertisement, including an affidavit of publication;
   b. DEO will either approve the procurement or notify the Subrecipient that the procurement cannot be approved because it violates State, Federal or local procurement guidelines. The Subrecipient shall notify DEO in writing no later than 90 calendar days from the effective date of this agreement if it will not be procuring any professional services or if it will be using non-CDBG-MIT funds to pay for professional services.

4. Prior to the obligation or disbursement of any funds, except for administrative expenses and not to exceed $5000, the Subrecipient shall complete the following:
   a. Submit for DEO's approval the documentation required in paragraph 3 above for any professional services contract. The Subrecipient proceeds at its own risk if more than the specified amount is incurred before DEO approves the procurement. If DEO does not approve the procurement of a professional services contract, the local government will not be able to use CDBG-MIT funds for that contract beyond $5,000.
   b. Comply with 24 CFR part 58 and the regulations implementing the National Environmental Policy Act, 40 CFR §§ 1500-1508. When the Subrecipient has completed the environmental review process, it shall submit a Request for Release of Funds and Certification. DEO will issue an Authority to Use Grant Funds (form HUD-7015.16) when this condition has been fulfilled to the satisfaction of DEO. If DEO has not issued an Authority to use Grant Funds within 15 days of Subrecipient's submission of the required documentation, DEO shall provide the Subrecipient a written update regarding the status of the review process. **SUBRECIPIENT SHALL NOT BEGIN CONSTRUCTION BEFORE DEO HAS ISSUED THE "AUTHORITY TO USE GRANT FUNDS."**

5. The Subrecipient agrees to comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. §§ 4601-4655; hereinafter, the "URA"), implementing regulations at 24 CFR part 42, 49 CFR part 24 and 24 CFR § 570.606(b), the requirements of 24 CFR § 42.325 – 42.350 governing the Residential Anti-displacement and Relocation Assistance Plan under section 104(d) of the Housing and Community Development Act of 1974 (42 U.S.C. § 5304(d)), and the requirements in 24 CFR § 570.606(d), governing optional relocation assistance policies.

6. If the Subrecipient undertakes any activity subject to the URA, the Subrecipient shall document completion of the acquisition by submitting all documentation required for a desk monitoring of the acquisition, including a notice to property owners of his or her rights under the URA, an invitation to accompany the appraiser, all appraisals, offer to the owner, acceptance, contract for sale, statement of settlement costs, copy of deed, waiver of rights (for donations), as applicable. The documentation shall be submitted prior to completing the acquisition (closing) so that DEO can determine whether remedial action may be needed. The Subrecipient shall provide relocation assistance to displaced

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persons as defined by 24 CFR § 570.606(b)(2), that are displaced as a direct result of acquisition, rehabilitation, demolition, or conversion for a CDBG-assisted project.

7. The Subrecipient shall timely submit completed forms for all prime and subcontractors as required by this Agreement, DEO, HUD, and applicable, regulations and guidance laws, specifically including but not limited to:

   a. Certification Regarding Debarment, Suspension, and Other Responsibility Matters (Primary Covered Transactions);
   b. Section 3 Participation Report (Construction Prime Contractor);
   c. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion (Subcontractor), (if applicable); and
   d. Section 3 Participation Report (Construction Subcontractor), (if applicable).

8. In addition, each construction contract or agreement for new or replacement housing must contain language that requires the contractor to meet the Green Building Standard for Replacement and New Construction of Residential Housing, as defined in the Allocation notice published in the Federal Register Volume 81, Number 224 on Monday, November 21, 2016.

9. For each Request for Funds (RFF) that includes reimbursement of construction costs, the Subrecipient shall provide a copy of the American Institute of Architects (AIA) form G702, Application and Certification for Payment, or a comparable form approved by DEO, signed by the contractor and inspection engineer, and a copy of form G703, Continuation Sheet, or a comparable form approved by DEO. For each RFF that includes construction costs, the Subrecipient shall provide a copy of AIA form G702, or a comparable form approved by DEO, if applicable, signed by the contractor and the local building inspector or housing specialist and a copy of form G703, or a comparable form approved by DEO, if applicable.

10. For each project, when the Subrecipient issues the Notice to Proceed to the contractor(s), copies of the following documents shall be sent to DEO:

    a. Notice to Proceed;
    b. The contractor's performance bond (100 percent of the contract price); and
    c. The contractor's payment bond (100 percent of the contract price).

11. The Subrecipient shall undertake an activity each quarter to affirmatively further fair housing pursuant to 24 CFR § 570.487(b).

12. The Subrecipient shall ensure that a deed restriction is recorded on any real property or facility, excluding easements, acquired with CDBG-MIT funds. This restriction shall limit the use of that real property or facility to the use stated in the subgrant application and that title shall remain in the name of the Subrecipient. Such deed restriction shall be made a part of the public records in the Clerk of Court of the county in which the real property is located. Any future disposition of that real property shall be in accordance with 24 CFR § 570.505. Any future change of use of real property shall be in accordance with 24 CFR § 570.489(j).

13. The Subrecipient shall comply with the historic preservation requirements of the National Historic Preservation Act of 1966, as amended, the procedures set forth in 36 CFR part 800, and the Secretary of the Interior's Standards for Rehabilitation, codified at 36 CFR 67, and Guidelines for Rehabilitating Historic Buildings.

14. Pursuant to section 102(b), Public Law 101-235, 42 U.S.C. § 3545, the Subrecipient shall update and submit Form HUD 2880 to DEO within thirty (30) calendar days of the Subrecipient's knowledge of changes in situations which would require that updates be prepared. The Subrecipient must disclose:

    a. All developers, contractors, consultants and engineers involved in the application or in the planning, development or implementation of the project or CDBG- MIT-funded activity; and
    b. Any person or entity that has a financial interest in the project or activity that exceeds $50,000 or 10 percent of the grant, whichever is less.

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15. If required, the Subrecipient shall submit a final Form HUD 2880, to DEO with the Subrecipient's request for administrative closeout, and its absence or incompleteness shall be cause for rejection of the administrative closeout.

16. Conflicts of interest relating to procurement shall be addressed pursuant to 24 CFR § 570.489(g). Title 24 CFR § 570.489(h) shall apply in all conflicts of interest not governed by 24 CFR § 570.489(g), such as those relating to the acquisition or disposition of real property; CDBG-MIT financial assistance to beneficiaries, businesses or other third parties; or any other financial interest, whether real or perceived. Additionally, the Subrecipient agrees to comply with, and this Agreement is subject to, Chapter 112 F.S.

17. Any payment by the Subrecipient using CDBG-MIT funds for acquisition of any property, right-of-way, or easement that exceeds fair market value as determined through the appraisal process established in HUD Handbook 1378 shall be approved in writing by DEO prior to distribution of the funds. Should the Recipient fail to obtain DEO pre-approval, any portion of the cost of the acquisition exceeding Fair Market Value shall not be paid or reimbursed with CDBG-MIT funds.

18. The Subrecipient shall take photographs or video of all activity locations prior to initiating any construction. As the construction progresses, additional photography or videography shall document the ongoing improvements. Upon completion of construction, final documentation of the activity locations will be provided to DEO with the administrative closeout package for this Agreement.

19. If an activity is designed by an engineer, architect or other licensed professional, it shall be certified upon completion by a licensed professional as meeting the specifications of the design, as may have been amended by change orders. The date of completion of construction shall be noted as part of the certification. This certification shall be accomplished prior to submission of an administrative closeout package and a copy of the certification shall be submitted with the administrative closeout package.

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The CDBG-MIT funds available to the Subrecipient through this agreement constitute a subaward of DEO's Federal award under the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 CFR part 200. This agreement includes terms and conditions of DEO's Federal award that are imposed on the Subrecipient and the Subrecipient agrees to carry out its obligations in compliance with all of the obligations described in this Agreement.

The Subrecipient agrees to, and, by signing this Agreement, certifies that, it will comply with all applicable provisions of the Housing and Community Development Act of 1974, as amended, and the regulations at 24 CFR part 570, as modified by the Federal Register notices that govern the use of CDBG-MIT funds available under this agreement. These Federal Register notices include, but are not limited to, Federal Register Guidance Vol. 84, No. 169/Friday, August 30, 2019/Notices, Vol. 81, No. 224/Monday, November 21, 2016/Notices, Volume 83, No. 28/Friday, February 9, 2018/Notices, Volume 82, No. 11/Wednesday, January 18, 2017/Notices, Volume 82, No. 150/Monday, August 7, 2017/Notices, and Vol. 83, No. 157/Tuesday, August 14, 2018/Notices. Notwithstanding the foregoing, (1) the Subrecipient does not assume any of DEO's responsibilities for environmental review, decision-making and action, described in 24 CFR part 58 and (2) the Subrecipient does not assume any of DEO's responsibilities for initiating the review process under the provisions of 24 CFR Part 52. The Subrecipient shall also comply with all other applicable Federal, state and local laws, regulations and policies as now in effect and as may be amended from time to time that govern the use of the CDBG-MIT funds in complying with its obligations under this agreement, regardless of whether CDBG-MIT funds are made available to the Subrecipient on an advance or reimbursement basis.

The Subrecipient also agrees to use funds available under this Agreement to supplement rather than supplant funds otherwise available. The Subrecipient further agrees to comply with all other applicable Federal, State, and local laws, regulations and policies governing the funds provided under this Agreement, including, but not limited to the following:

1. State of Florida Requirement
   State of Florida Requirements are stated throughout this Agreement and Attachments thereto.

2. Audits, Inspections and Monitoring
   a. Single Audit
      The Subrecipient must be audited as required by 2 CFR part 200, subpart F when it is expected that the Subrecipient's Federal awards expended during the respective fiscal year equaled or exceeded the threshold set forth in §200.501 Audit requirements.

   b. Inspections and Monitoring
      The Subrecipient shall permit DEO and auditors to have access to the Subrecipient's records and financial statements as necessary for DEO to meet the requirements of 2 CFR part 200.

      The Subrecipient must submit to monitoring of its activities by DEO as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of this agreement.

      This review must include:
      (1) Reviewing financial and performance reports required by DEO;
      (2) Following up and ensuring that the Subrecipient takes timely and appropriate action on all deficiencies pertaining to the Federal award provided to the Subrecipient from DEO detected through audits, on-site reviews, and other means; and
      (3) Issuing a management decision for audit findings pertaining to this Federal award provided to the Subrecipient from DEO as required by 2 CFR §200.521.

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c. Corrective Actions
The Subrecipient shall be subject to reviews and audits by DEO, including onsite reviews of the Subrecipient as may be necessary or appropriate to meet the requirements of 42 U.S.C. 5304(e)(2). DEO may issue management decisions and may consider taking enforcement actions if noncompliance is detected during audits. DEO may require the Subrecipient to take timely and appropriate action on all deficiencies pertaining to the Federal award provided to the subrecipient from the pass-through entity detected through audits, on-site. DEO may impose additional conditions on the use of the CDBG-MIT funds to ensure future compliance or provide training and technical assistance as needed to correct noncompliance.

3. Drug-Free Workplace
Subrecipients must comply with drug-free workplace requirements in Subpart B of part 2429, which adopts the government-wide implementation (2 CFR part 182) of sections 5152-5158 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701-707).

4. Procurement and Contractor Oversight
The Subrecipient shall comply with the procurement standards in 2 CFR §200.318 - §200.327 when procuring property and services under this agreement. The Subrecipient shall impose the Subrecipient's obligations under this agreement on its contractors, specifically or by reference, so that such obligations will be binding upon each of its contractors.

The Subrecipient must comply with CDBG regulations regarding debarred or suspended entities, specifically including, 24 CFR 570.609 or 24 CFR 570.489, as applicable. CDBG funds may not be provided to excluded or disqualified persons.

The Subrecipient shall maintain oversight of all activities under this agreement and shall ensure that for any procured contract or agreement, its contractors perform according to the terms and conditions of the procured contracts or agreements, and the terms and conditions of this agreement. To check for debarred or suspended entities, please visit https://www.sam.gov/SAM/

5. Property Standards
Real property acquired by the Subrecipient under this agreement shall be subject to 24 CFR 570.489(j) and 24 CFR 570.200(j). The Subrecipient shall also comply with the Property Standards at 2 CFR 200.310, 2 CFR 200.312, 2 CFR 200.314 through 2 CFR 200.316. The Subrecipient shall also comply with 2 CFR 200.313 Equipment, except that when the equipment is sold, the proceeds shall be program income and equipment not needed by the Subrecipient for activities under this agreement shall be transferred to DEO for its CDBG-MIT program or shall be retained after compensating DEO.

The Subrecipient shall also comply with the Property Standards in 2 CFR 200.310 through 2 CFR 200.316, except to the extent they are inconsistent with 24 CFR 570.200(j) and 24 CFR 570.489(j), in which case Subrecipient shall comply with 24 CFR 570.200(j) and 24 CFR 570.489(j), except to the extent that proceeds from the sale of equipment are program income and subject to the program income requirements under this agreement, pursuant to 24 CFR 570.489(e)(1)(ii).

6. Federal Funding Accountability and Transparency Act (FFATA)
The Subrecipient shall comply with the requirements of 2 CFR part 25 Universal Identifier and System for Award Management (SAM). The Subrecipient must have an active registration in SAM, https://www.sam.gov/SAM/ in accordance with 2 CFR part 25, appendix A, and must have a Unique Entity Identifies (UEI) number https://fedgov.dnb.com/webform/ The Subrecipient must also comply with provisions of the Federal Funding Accountability and Transparency Act, which includes requirements on executive compensation, 2 CFR part 170 Reporting Subaward and Executive Compensation Information.

7. Relocation and Real Property Acquisition
The Subrecipient shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (URA), 42 USC 4601 – 4655, 49 CFR part 24, 24 CFR part 42, and 24 CFR 570.606.

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In addition to other URA requirements, these regulations (49 CFR § 24.403(d)) implement Section 414 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 USC § 5181, which provides that "Notwithstanding any other provision of law, no person otherwise eligible for any kind of replacement housing payment under the URA shall be denied such eligibility as a result of his being unable, because of a major disaster as determined by the President, to meet the occupancy requirements set by such Act".

8. Non-discrimination

a. 24 CFR Part 6

The Subrecipient will comply with 24 CFR part 6, which implements the provisions of section 109 of title I of the Housing and Community Development Act of 1974 (Title I) (42 U.S.C. 5309). Section 109 provides that no person in the United States shall, on the ground of race, color, national origin, religion or sex, be excluded from participation in, be denied the benefits of or be subjected to discrimination under any program or activity funded in whole or in part with Federal financial assistance. The Subrecipient will adhere to the prohibitions against discrimination on the basis of age under the Age Discrimination Act of 1975 (42 U.S.C. 6101-6107) (Age Discrimination Act) and the prohibitions against discrimination on the basis of disability under section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) (Section 504). Section 109 of the HCDA makes these requirements applicable to programs or activities funded in whole or in part with CDBG-MIT funds. Thus, the Subrecipient shall comply with regulations of 24 CFR part 8, which implement Section 504 for HUD programs, and the regulations of 24 CFR part 146, which implement the Age Discrimination Act for HUD programs.

b. Architectural Barriers Act and the Americans with Disabilities Act

The Subrecipient shall ensure that its activities are consistent with requirements of Architectural Barriers Act and the Americans with Disabilities Act. The Architectural Barriers Act of 1968 (42 U.S.C. 4151-4157) requires certain Federal and Federally funded buildings and other facilities to be designed, constructed, or altered in accordance with standards that ensure accessibility to, and use by, physically handicapped people. A building or facility designed, constructed or altered with funds allocated or reallocated under this part after December 11, 1995 and meets the definition of "residential structure" as defined in 24 CFR 40.2 or the definition of "building" as defined in 41 CFR 101-19.602(a) is subject to the requirements of the Architectural Barriers Act of 1968 (42 U.S.C. 4151-4157) and shall comply with the Uniform Federal Accessibility Standards (appendix A to 24 CFR part 40 for residential structures, and appendix A to 41 CFR part 101-19, subpart 101-19.6, for general type buildings).

The Americans with Disabilities Act (42 U.S.C. 12131; 47 U.S.C. 155, 201, 218 and 225) (ADA) provides comprehensive civil rights to individuals with disabilities in the areas of employment, public accommodations, State and local government services and telecommunications. It further provides that discrimination includes a failure to design and construct facilities for first occupancy no later than January 26, 1993, that are readily accessible to and usable by individuals with disabilities. Further, the ADA requires the removal of architectural barriers and communication barriers that are structural in nature in existing facilities, where such removal is readily achievable—that is, easily accomplishable and able to be carried out without much difficulty or expense.

c. State and Local Nondiscrimination Provisions

The Subrecipient must comply with the Florida Small and Minority Business Assistance Act (§§ 288.703-288.706, F.S.); Title VI of the Civil Rights Act of 1964 (24 CFR part 1)

(1) General Compliance

The Subrecipient shall comply with the requirements of Title VI of the Civil Rights Act of 1964 (P.L. 88-352), as amended. No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity funded by this agreement. The specific nondiscrimination provisions at 24 CFR 1.4 apply to the use of these funds. The Subrecipient shall not intimidate, threaten, coerce or discriminate against any person for the purpose of interfering with any right or privilege secured by title VI of the Civil Rights Act of 1964 or 24 CFR part 1, or because an individual has made a complaint, testified, assisted or participated in any manner in an investigation, proceeding or hearing under 24 CFR part 1. The identity of complainants

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shall be kept confidential except to the extent necessary to carry out the purposes of 2 CFR part 1, including the conduct of any investigation, hearing or judicial proceeding arising thereunder.

(2) Assurances and Real Property Covenants

As a condition to the approval of this Agreement and the extension of any Federal financial assistance, the Subrecipient assures that the program or activities described in this Agreement will be conducted and the housing, accommodations, facilities, services, financial aid or other benefits to be provided will be operated and administered in compliance with all requirements imposed by or pursuant to this part 1.

If the Federal financial assistance under this agreement is to provide or is in the form of personal property or real property or interest therein or structures thereon, the Subrecipient's assurance herein shall obligate the Subrecipient or, in the case of a subsequent transfer, the transferee, for the period during which the property is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits, or for as long as the recipient retains ownership or possession of the property, whichever is longer. In all other cases, the assurance shall obligate the Subrecipient for the period during which Federal financial assistance is extended pursuant to the contract or application. This assurance gives DEO and the United States a right to seek judicial enforcement of the assurance and the requirements on real property.

In the case of real property, structures or improvements thereon, or interests therein, acquired with Federal financial assistance under this Agreement or acquired with CDBG-MIT funds and provided to the Subrecipient under this Agreement, the instrument effecting any disposition by the Subrecipient of such real property, structures or improvements thereon, or interests therein, shall contain a covenant running with the land assuring nondiscrimination for the period during which the real property is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If the Subrecipient receives real property interests or funds or for the acquisition of real property interests under this Agreement, to the extent that rights to space on, over, or under any such property are included as part of the program receiving such assistance, the nondiscrimination requirements of this part 1 shall extend to any facility located wholly or in part in such space.

d. Affirmative Action

(1) Approved Plan

The Subrecipient agrees that it shall carry out pursuant to DEO's specifications an Affirmative Action Program in compliance with the President's Executive Order 11246 of September 24, 1965, as amended, and implementing regulations at 41 CFR 60. DEO shall provide Affirmative Action guidelines to the Subrecipient to assist in the formulation of such program. The Subrecipient shall submit a plan for an Affirmative Action Program for approval prior to the release of funds under this agreement.

(2) Women- and Minority-Owned Businesses (W/MBE)

The Subrecipient shall take the affirmative steps listed in 2 CFR 200.321(b)(1) through (5) to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible when the Subrecipient procures property or services under this agreement.

(3) Notifications

The Subrecipient will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or worker's representative of the Subrecipient's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) Equal Employment Opportunity and Affirmative Action (EEO/AA) Statement

The Subrecipient shall, in all solicitations or advertisements for employees placed by or on behalf of the Subrecipient, state that it is an Equal Opportunity or Affirmative Action employer.

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9. Labor and Employment

Labor Standards

The Subrecipient shall comply with the in labor standards in Section 110 of the Housing and Community Development Act of 1974, as amended and ensure that all laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed in whole or in part with assistance received under this agreement shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis- Bacon Act, as amended (40 U.S.C. 3141, *et seq.*) and 29 CFR part 1, 3, 5, 6 and 7, provided, that this requirement shall apply to the rehabilitation of residential property only if such property contains not less than 8 units.

The Subrecipient agrees to comply with the Copeland Anti-Kick Back Act (18 U.S.C. 874) and its implementing regulations of the U.S. Department of Labor at 29 CFR part 3 and part 5. The Subrecipient shall maintain documentation that demonstrates compliance with applicable hour and wage requirements. Such documentation shall be made available to DEO for review upon request.

10. Section 3 of the Housing and Urban Development Act of 1968

a. Low-Income Person Definition

A low-income person, as this term is defined in Section 3 (b)(2) of the 1937 Act (42 U.S.C. 1437a(b)(2)). Section 3(b)(2) of the 1937 Act defines this term to mean families (including single persons) whose incomes do not exceed 80 per centum of the median income for the area, as determined by the Secretary, with adjustments for smaller and larger families, except that the Secretary may establish income ceilings higher and or lower than 80 per centum of the median for the area on the basis of the Secretary's findings that such variations are necessary because of prevailing levels of construction costs or unusually high or low-income families; or (ii) A very low-income person, as this term is defined in Section 3(b)(2) of the 1937 Act (42 U.S.C. 1437 a(b)(2)). Section 3(b)(2) of the 1937 Act (42 U.S.C. 1437a(b)(2)) defines this term to mean families (including single persons) whose incomes do not exceed 50 per centum of the median family income for the area, as determined by the Secretary with adjustments for smaller and larger families, except that the Secretary may establish income ceilings higher or lower than 50 per centum of the median for the area on the basis of the Secretary's findings that such variations are necessary because of unusually high or low family incomes.

b. Compliance

Subrecipient shall comply with the provisions of Section 3 of the Housing Urban Development Act of 1968, as amended, 12 USC 1701u, and implementing its implementing regulations at 24 CFR part 75 (formerly 24 CFR part 135). Compliance with Section 3 shall be achieved, to the greatest extent feasible, consistent with existing Federal, state and local laws and regulations. Accordingly, a subrecipient of Section 3-covered assistance is required to develop strategies for meeting both the regulatory requirements at 24 CFR part 75 and any other applicable statutes or regulations. Subrecipient and any of its contractors and subcontractors shall include the following "Section 3 clause" in every "Section 3-covered contract":

(1) The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(2) The parties to this contract agree to comply with HUD's regulations in 24 CFR part 75, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.

(3) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants

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for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

(4) The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 75.

(5) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 75.

(6) Noncompliance with HUD's regulations in 24 CFR part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

(7) With respect to work performed in connection with Section 3 covered Indian housing assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).

c. Section 3 Benchmarks and Reporting

A. Benchmarks. Contracts over $200,000 trigger Section 3 Benchmark requirements. When triggered, best efforts must be made to extend Section 3 opportunities to verified Section 3 workers and business concerns to meet these *minimum* numeric goals:

1. Twenty-five percent (25%) of the total hours on a Section 3 project must be worked by Section 3 workers; and
2. Five percent (5%) of the total hours on a Section 3 project must be worked by Targeted Section 3 workers.

B. Reporting. If the subrecipient's reporting indicates that the subrecipient has not met the Section 3 benchmarks described in 24 CFR § 75.23, pursuant to 24 CFR § 75.25(b), the subrecipient must report in a form prescribed by HUD on the qualitative nature of its activities and those its contractors and subcontractors pursued.

C. Recipient will comply with any Section 3 Project Implementation Plan documents provided by HUD or DEO which may be amended from time to time for HUD reporting purposes.

11. Conduct

a. Hatch Act

The Subrecipient shall comply with the Hatch Act, 5 USC 1501 – 1508, and shall ensure that no funds provided, nor personnel employed under this agreement, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V of the U.S.C.

b. Conflict of Interest

In the procurement of supplies, equipment, construction, and services pursuant to this agreement, the Subrecipient shall comply with the conflict of interest provisions in DEO's procurement policies and procedures. In all cases not governed by the conflict of interest provisions in DEO's procurement policies and procedures, the Subrecipient shall comply with the conflict of interest provisions in 24 CFR 570.489(h).

c. Lobbying Certification

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The Subrecipient hereby certifies that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

(3) The language of paragraph (i) through (iv) of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly; and

(4) This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is required by section 1352, title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

d. Religious Activities

The Subrecipient agrees that funds provided under this agreement shall not be utilized for inherently religious activities prohibited by 24 CFR 570.200(j), such as worship, religious instruction, or proselytization.

Equal Treatment for Faith-Based Organizations. Prohibits any State or local government receiving funds under any Department program, or any intermediate organization with the same duties as a governmental entity, from discriminating for or against an organization on the basis of the organization's religious character or affiliation. Prohibits religious organizations from engaging in inherently religious activities, such as worship, religious instruction, or proselytization, as part of the programs or services funded with direct financial assistance.

Prohibits an organization that participates in programs funded by direct financial assistance from the Department, in providing services, from discriminating against a program beneficiary or prospective program beneficiary on the basis of religion or religious belief. Any restrictions on the use of grant funds shall apply equally to religious and non-religious organizations.

e. Environmental Conditions

(1) Prohibition on Choice Limiting Activities Prior to Environmental Review

The Subrecipient must comply with the limitations in 24 CFR 58.22 even though the Subrecipient is not delegated the requirement under Section 104(g) of the HCD Act for environmental review, decision- making and action (see 24 CFR part 58) and is not delegated DEO's responsibilities for initiating the review process under the provisions of 24 CFR Part 52. 24 CFR 58.22 imposes limitations on activities pending clearance and specifically limits commitments of HUD funds or non-HUD funds by any participant in the development process before completion of the environmental review. A violation of this requirement may result in a prohibition on the use of Federal funds for the activity. If DEO has not issued an Authority to Use Grant Funds within 15 days of Subrecipient's submission of the required documentation, DEO shall provide the Subrecipient a written update regarding the status of the review process.

(2) Air and Water

The Subrecipient shall comply with the following requirements insofar as they apply to the performance of this agreement:

(a) Air quality. (1) The Clean Air Act (42 U.S.C. 7401 et. seq.) as amended; particularly section 176(c) and (d) (42 U.S.C. 7506(c) and (d)); and (2) Determining Conformity of Federal Actions to State or Federal Implementation Plans (Environmental Protection Agency—40 CFR parts 6, 51, and 93); and

(b) Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251, *et seq.*, as amended, including the requirements specified in Section 114 and Section 308 of the Federal Water Pollution Control Act, as amended, and all regulations and guidelines issued thereunder.

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(c) The Clean Air and Water Act: If this Contract is in excess of $100,000, Contractor shall comply with all applicable standards, orders or regulations issued under the Clean Air Act, as amended, 42 U.S.C. 7401, Section 508 of the Clean Water Act, as amended, 33 U.S.C. 1368, et seq., Executive Order 11738 and Environmental Protection Agency regulations. Contractor shall report any violation of the above to DEO.

(d) Energy Efficiency: Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the State of Florida's energy conservation plan issued in compliance with the Energy Policy and Conservation Act, Pub. L. 94-163.

(3) Flood Disaster Protection

The Subrecipient shall comply with the mandatory flood insurance purchase requirements of Section 102 of the Flood Disaster Protection Act of 1973, as amended by the National Flood Insurance Reform Act of 1994, 42 USC 4012a. Additionally, the Subrecipient shall comply with Section 582 of the National Flood Insurance Reform Act of 1994, as amended, (42 U.S.C. 5154a), which includes a prohibition on the provision of flood disaster assistance, including loan assistance, to a person for repair, replacement or restoration for damage to any personal, residential, or commercial property if that person at any time has received Federal flood disaster assistance that was conditioned on the person first having obtained flood insurance under applicable Federal law and the person has subsequently failed to obtain and maintain flood insurance as required under applicable Federal law on such property. Section 582 also includes a responsibility to notify property owners of their responsibility to notify transferees about mandatory flood purchase requirements. More information about these requirements is available in the Federal Register notices governing the CDBG-MIT award and listed at the beginning of this Attachment.

(4) Lead-Based Paint

The Subrecipient shall follow DEO's procedures with respect to CDBG assistance that fulfill the objectives and requirements of the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), the Residential Lead-Based Paint Hazard Reduction Act of 1992 (42 U.S.C. 4851-4856), and implementing regulations at part 35, subparts A, B, J, K, and R of this title.

(5) Historic Preservation

The Subrecipient shall comply with the Historic Preservation requirements set forth in the National Historic Preservation Act of 1966, as amended, codified in title 54 of the United States Code, and the procedures set forth in 36 CFR part 800 insofar as they apply to the performance of this agreement.

In general, this requires concurrence from the State Historic Preservation Officer for all rehabilitation and demolition of historic properties that are fifty years old or older or that are included on a Federal, State, or local historic property list.

(6) **Additional Regulations**

(a) The Temporary Assistance for Needy Families Program ("TANF"), 45 CFR Parts 260-265, the Social Services Block Grant ("SSBG"), 42 U.S.C. 1397d, and other applicable federal regulations and policies promulgated thereunder.

(b) Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. 1681, *et seq.*, which prohibits discrimination on the basis of sex in educational programs.

(c) Section 654 of the Omnibus Budget Reconciliation Act of 1981, as amended, 42 U.S.C. 9849, which prohibits discrimination on the basis of race, creed, color, national origin, sex, handicap, political affiliation or beliefs.

(d) The Pro-Children Act: Contractor agrees to comply with the Pro-Children Act of 1994, 20 U.S.C. 6083. Failure to comply with the provisions of the law may result in the imposition of civil monetary penalty up to $1,000 for each violation and/or the imposition of an administrative compliance order on the responsible entity. This clause is applicable to all approved sub-contracts. In compliance with Public Law (Pub. L.) 103-277, the Contract shall not permit smoking in any portion of any indoor facility used for the provision of federally funded services including health, day care, early childhood development, education or library services on a routine or regular basis, to children up to age 18.

(e) Public Announcements and Advertising: When issuing statements, press releases, requests for proposals, bid solicitations and other documents describing projects or programs funded in whole or in part with federal money, Contractor shall clearly state (1) the percentage of the total costs of the program or project which will be financed with federal money, (2) the dollar amount of federal funds for the project

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or program, and (3) percentage and dollar amount of the total costs of the project or program that will be financed by nongovernmental sources.

(f) Purchase of American-Made Equipment and Products: Contractor assures that, to the greatest extent practicable, all equipment and products purchased with funds made available under this Agreement will be American-made.

(g) The Consolidated Appropriations Act, 2010, Division E, Section 511 (Pub. L. 111-117), which prohibits distribution of federal funds made available under the Act to the Association of Community Organizations for Reform Now (ACORN) or its subsidiaries. The Continuing Appropriations Act, 2011, Sections 101 and 103 (Pub. L. 111-242), provides that appropriations made under Pub. L. 111-117 are available under the conditions provided by Pub. L. 111-117.

(h) Contract Work Hours and Safety Standards Act (40 U.S.C. §327–333) — If this Contract involves federal funding in excess of $2,000 for construction contracts or in excess of $2,500 for other contracts that involve the employment of mechanics or laborers, compliance with sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327–333), as supplemented by Department of Labor regulations (29 CFR Part 5) is required. Under section 102 of the Act, each contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than 1 ½ times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(i) Resource Conservation and Recovery Act (RCRA). Under RCRA (Pub. L. 94–580 codified at 42 U.S.C. 6962), state and local institutions of higher education, hospitals, and non-profit organizations that receive direct Federal awards or other Federal funds shall give preference in their procurement programs funded with Federal funds to the purchase of recycled products pursuant to the EPA guidelines.

(j) Immigration Reform and Control Act. Contractor shall comply with the requirements of the Immigration Reform and Control Act of 1986, which requires employment verification and retention of verification forms for any individuals hired who will perform any services under the contract.

When it is determined that the Subrecipient is in non-compliance with federal or state program requirements, the State may impose any of the additional conditions and/or requirements outlined in 2 CFR § 200.207.

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Fair Housing

As a condition for the receipt of CDBG-MIT funds, each Subrecipient must certify that it will "affirmatively further fair housing" in its community. A Subrecipient shall demonstrate its commitment to affirmatively further fair housing by implementing the actions listed below.

Each Subrecipient shall do the following:

1. Have in place a fair housing resolution or ordinance that covers all Federally protected classes (race, color, familial status, handicap, national origin, religion and sex);
2. Designate an employee as the Fair Housing Coordinator who is available during regular business hours to receive fair housing calls;
3. Publish the Fair Housing Coordinator's contact information quarterly in a newspaper of general circulation in the Subrecipient's jurisdiction so that people know who to call to ask fair housing questions or register a complaint. Alternatively, the Subrecipient can post the coordinator's contact information throughout the quarter on the home page of its website;
4. Establish a system to record the following for each fair housing call:
   a) The nature of the call,
   b) The actions taken in response to the call,
   c) The results of the actions taken and
   d) If the caller was referred to another agency, the results obtained by the referral agency;
5. Conduct at least one fair housing activity each quarter. Identical activities (see examples below) shall not be conducted in consecutive quarters; and
6. Display a fair housing poster in the CDBG-MIT Office. (This does not count as a fair housing activity.)

The Subrecipient shall ensure that the fair housing contact person has received training so that he/she can handle fair housing phone inquiries or refer the inquiries to the appropriate people/agencies. Records maintained by the contact will help the community do the following:

1. Define where discriminatory practices are occurring,
2. Help the community measure the effectiveness of its outreach efforts, and
3. Provide the community with a means to gain information that can be used to design and implement strategies that will eliminate fair housing impediments.

Examples of fair housing activities include the following:

1. Making fair housing presentations at schools, civic clubs and neighborhood association meetings;
2. Conducting a fair housing poster contest or an essay contest;
3. Manning a booth and distributing fair housing materials at libraries, health fairs, community events, yard sales and church festivals; and
4. Conducting fair housing workshops for city/county employees, realtors, bank and mortgage company employees, insurance agents and apartment complex owners.

Printing a fair housing notice on a utility bill is no longer accepted as a fair housing activity; however, mailing a DEO-approved fair housing brochure as an insert with utility bills will be accepted as an activity. Placing posters in public buildings does not meet the requirement for a fair housing activity.

The Subrecipient shall document its fair housing activities by keeping photographs, newspaper articles, sign-in sheets and copies of handouts in their CDBG-MIT project file and include information about the activities in the comment section of each quarterly report.

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Equal Employment Opportunity

As a condition for the receipt of CDBG-MIT funds, each Subrecipient must certify that it and the contractors, subcontractors, subrecipients and consultants that it hires with CDBG-MIT funds will abide by the Equal Employment Opportunity (EEO) Laws of the United States. A Subrecipient shall demonstrate its commitment to abide by the laws through the actions listed below.

Each Subrecipient shall do the following:

1. Have in place an equal employment opportunity resolution or ordinance that protects its applicants and employees and the applicants and employees of its contractors, subcontractors, subrecipients and consultants from discrimination in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral and other aspects of employment, on the basis of race, color, religion, sex, national origin, disability, age or genetics;
2. Designate an employee as the EEO Coordinator who is available during regular business hours to receive EEO calls;
3. Publish the EEO Coordinator's contact information quarterly in a newspaper of general circulation in the Subrecipient's jurisdiction so that people know who to call to ask EEO questions or register a complaint. Alternatively, the Subrecipient can post the coordinator's contact information throughout the quarter on the home page of its website; and
4. Establish a system to record the following for each EEO call:
   a) The nature of the call,
   b) The actions taken in response to the call and
   c) The results of the actions taken;
5. Each Subrecipient shall maintain a list of certified minority-owned business enterprises (MBE) and women-owned business enterprises (WBE) that operate in its region. The Subrecipient shall use this list to solicit companies to bid on CDBG-MIT-funded construction activities and shall provide a copy of the list to the prime contractor(s) to use when it hires subcontractors and consultants. The Department of Management Services maintains a list of certified minority- and women-owned businesses that can be used to develop a local MBE/WBE list at the following website: https://osd.dms.myflorida.com/directories.
6. Incorporate the Equal Employment Opportunity clause set forth in 41 CFR Part 60-1.4(b) into any contracts or subcontracts that meet the definition of "federally assisted construction contract" in 41 CFR 60-1.3.

Section 504 and the Americans with Disabilities Act (ADA)

As a condition for the receipt of CDBG-MIT funds, the Subrecipient must certify that it provides access to all federally funded activities to all individuals, regardless of handicap. The Subrecipient shall demonstrate its commitment to abide by the laws through the actions listed below.

The Subrecipient shall do the following:

1. Have in place a resolution or ordinance that is designed to eliminate discrimination against any person who:
   a) Has a physical or mental impairment which substantially limits one or more major life activities,
   b) Has a record of such an impairment, or
   c) Is regarded as having such an impairment;
2. Designate an employee as the Section 504/ADA Coordinator who is available during regular business hours to receive Section 504/ADA calls;
3. Publish the Section 504/ADA Coordinator's contact information quarterly in a newspaper of general circulation in the Subrecipient's jurisdiction so that people know who to call to ask Section 504/ADA questions or register a complaint. Alternatively, the Subrecipient can post the coordinator's contact information throughout the quarter on the home page of its website; and
4. Establish a system to record the following for each Section 504/ADA call:
   a) The nature of the call,
   b) The actions taken in response to the call and

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c) The results of the actions taken.

Section 504 prohibitions against discrimination (see 45 CFR part 84) apply to service availability, accessibility, delivery, employment and the administrative activities and responsibilities of organizations receiving Federal financial assistance. A Subrecipient of Federal financial assistance may not, on the basis of disability:

1. Deny qualified individuals the opportunity to participate in or benefit from Federally funded programs, services or other benefits,
2. Deny access to programs, services, benefits or opportunities to participate as a result of physical barriers, or
3. Deny employment opportunities, including hiring, promotion, training and fringe benefits, for which they are otherwise entitled or qualified.

The ADA regulations (Title II, 28 CFR part 35, and Title III, 28 CFR part 36) prohibit discrimination on the basis of disability in employment, State and local government, public accommodations, commercial facilities, transportation, and telecommunications. To be protected by the ADA, one must have a disability or have a relationship or association with an individual with a disability.

Title II covers all activities of state and local governments regardless of the government entity's size or receipt of Federal funding. Title II requires that State and local governments give people with disabilities an equal opportunity to benefit from all of their programs, services and activities (e.g. public education, employment, transportation, recreation, health care, social services, courts, voting and town meetings). State and local governments are required to follow specific architectural standards in the new construction and alteration of their buildings. They also must relocate programs or otherwise provide access in inaccessible older buildings, and communicate effectively with people who have hearing, vision or speech disabilities.

Title III covers businesses and nonprofit service providers that are public accommodations, privately operated entities offering certain types of courses and examinations, privately operated transportation and commercial facilities. Public accommodations are private entities who own, lease, lease to or operate facilities such as restaurants, retail stores, hotels, movie theaters, private schools, convention centers, doctors' offices, homeless shelters, transportation depots, zoos, funeral homes, day care centers and recreation facilities including sports stadiums and fitness clubs. Transportation services provided by private entities are also covered by Title III.

Section 3 - Economic Opportunities for Low- and Very Low-Income Persons

Each Subrecipient shall encourage its contractors to hire qualified low- and moderate-income residents for any job openings that exist on CDBG-MIT-funded projects in the community. The Subrecipient and its contractors shall keep records to document the number of low- and moderate-income people who are hired to work on CDBG-MIT-funded projects. The number of low- and moderate-income residents who are hired to work of the project shall be reported in the comment section of the quarterly report.

The following Section 3 clause is required to be included in any contracts and subcontracts funded by this Agreement:

Section 3 Clause

1. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. § 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are Subrecipients of HUD assistance for housing.

2. The Parties to this contract agree to comply with HUD's regulations in 24 CFR part 75, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.

3. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 clause, and will post copies of the

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notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

4. The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 75.
5. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 75.
6. Noncompliance with HUD's regulations in 24 CFR part 75 may result in sanctions, termination of this contract for default and debarment or suspension from future HUD assisted contracts.
7. With respect to work performed in connection with Section 3 covered Indian housing assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).

Civil Rights Regulations

As a condition for the receipt of CDBG-MIT funds, each Subrecipient must certify that it will abide by the following Federal laws and regulations:

1. Title VI of the Civil Rights Act of 1964 – Prohibits discrimination by government agencies that receive Federal funding;
2. Title VII of the Civil Rights Act of 1964 – prohibits employment discrimination on the basis of race, color, religion, sex or national origin;
3. Title VIII of the Civil Rights Act of 1968 – as amended (the Fair Housing Act of 1988);
4. 24 CFR § 570.487(b) – Affirmatively Furthering Fair Housing;
5. 24 CFR § 570.490(b) – Unit of general local government's record;
6. 24 CFR § 570.606(b) – Relocation assistance for displaced persons at URA levels;
7. Age Discrimination Act of 1975;
8. Executive Order 12892 – Leadership and Coordination of Fair Housing in Federal Programs: Affirmatively Furthering Fair Housing;
9. Section 109 of the Housing and Community Development Act of 1974 – No person shall be excluded from participation in, denied benefits of or subjected to discrimination under any program or activity receiving CDBG-MIT funds because of race, color, religion, sex or national origin;
10. Section 504 of the Rehabilitation Act of 1973 and 24 CFR part 8, which prohibits discrimination against people with disabilities;
11. Executive Order 11063 – Equal Opportunity in Housing;
12. Executive Order 11246 – Equal Employment Opportunity; and
13. Section 3 of the Housing and Urban Development Act of 1968, as amended – Employment/Training of Lower Income Residents and Local Business Contracting.

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I hereby certify that the City of Opa-Locka shall comply with all of the provisions and Federal regulations listed in this Attachment F.

By: _____ **Date:** 12/06/2022

Name: Veronica Williams

Title: Mayor

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Attachment G – Reports

The following reports must be completed and submitted to DEO in the time frame indicated below. Failure to timely file these reports constitutes an Event of Default, as defined in Paragraph (10) Default, of this Agreement.

1. **Monthly Progress Report** must be submitted to DEO ten (10) calendar days after the end of each month.

2. A **Quarterly Progress** Report must be submitted to DEO on forms to be provided by DEO no later than the 10th of every April, July, October and January.

3. A **Contract and Subcontract Activity** form, Form HUD-2516, currently available at https://www.hud.gov/sites/documents/DOC_36660; which is incorporated herein by reference, must be submitted by April 15 and October 15 each year through the DEO's SERA reporting system. The form must reflect all contractual activity for the period, including Minority Business Enterprise and Woman Business Enterprise participation. If no activity has taken place during the reporting period, the form must indicate "no activity".

   The Subrecipient shall closeout its use of the CDBG-MIT funds and its obligations under this Agreement by complying with the closeout procedures in 2 CFR § 200.343. Activities during this close-out period may include, but are not limited to: making final payments, disposing of program assets (including the return of all unused materials, equipment, unspent cash advances, program income balances and accounts receivable to the Subrecipient) and determining the custodianship of records.

   Notwithstanding the terms of 2 CFR 200.343, upon the expiration of this Agreement, the Subrecipient shall transfer to the recipient any CDBG-MIT funds on hand at the time of expiration and any accounts receivable attributable to the use of CDBG-MIT funds. Further, any real property under the Subrecipient's control that was acquired or improved in whole or in part with CDBG-MIT funds (including CDBG-MIT funds provided to the Subrecipient in the form of a loan) shall be treated in accordance with 24 CFR 570.503(b)(7).

4. In accordance with 2 CFR part 200, should the Subrecipient meet the threshold for submission of a single or program specific audit, the audit must be conducted in accordance with 2 CFR part 200 and submitted to DEO no later than nine months from the end of the Subrecipient's fiscal year. If the Subrecipient did not meet the audit threshold, an **Audit Certification Memo** must be provided to DEO no later than nine months from the end of the Subrecipient's fiscal year.

5. A copy of the **Audit Compliance Certification** form, Attachment J, must be emailed to audit@deo.myflorida.com within sixty (60) calendar days of the end of each fiscal year in which this subgrant was open.

6. **Section 3 Quarterly Reporting Requirements**. Reporting of labor hours for Section 3 projects must comply with 24 CFR §75.25(a). Subrecipients must report the following: (i) the total number of labor hours worked; (ii) the total number of labor hours worked by Section 3 workers; and (iii) the total number of labor hours worked by Targeted Section 3 workers. If Section 3 benchmarks are not met, the subrecipient's qualitative efforts must be reported in a manner required by 24 CFR §75.25(b).

   Subrecipients shall provide Section 3 Reporting quarterly to DEO by the 10th of each quarter (January 10, April 10, July 10, and October 10). For Section 3 Reporting, Subrecipients should complete and return the Project Implementation Plan template to DEO.

7. Request for Funds must be submitted as required by DEO and in accordance with the ***Project Description and Deliverables***, ***Project Budget and Activity Work Plan.***

8. All forms referenced herein are available online or upon request from DEO's grant manager for this Agreement.

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Financial Management

The Subrecipient's financial management system must comply with the provisions of 2 CFR part 200 (and particularly 2 C.F.R 200.302 titled "Financial Management"), Section 218.33, F.S., and include the following:

1. Accurate, current and complete disclosure of the financial results of this project or program.
2. Records that identify the source and use of funds for all activities. These records shall contain information pertaining to grant awards, authorizations, obligations, unobligated balances, assets, outlays, income and interest.
3. Effective control over and accountability for all funds, property and other assets. The Subrecipient shall safeguard all assets and assure that they are used solely for authorized purposes.
4. Comparison of expenditures with budget amounts for each Request for Funds (RFF). Whenever appropriate, financial information should be related to performance and unit cost data.
5. Written procedures to determine whether costs are allowed and reasonable under the provisions of the 2 CFR part 200 (and particularly 2 CFR 200 Subpart E titled "Costs Principles") and the terms and conditions of this Agreement.
6. Cost accounting records that are supported by backup documentation.

Competition

All procurement transactions must follow the provisions of 2 CFR §§ 200.318-200.327 and be conducted in a manner providing full and open competition. The Subrecipient shall be alert to conflicts of interest as well as noncompetitive practices among contractors that may restrict or eliminate competition or otherwise restrain trade. In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, invitations for bids or requests for proposals shall be excluded from competing for such procurements. Awards must be made to the responsible and responsive bidder or offeror whose proposal is most advantageous to the program, considering the price, quality and other factors. Solicitations shall clearly set forth all requirements that the bidder or offeror must fulfill in order for the bid or offer to be evaluated by the Subrecipient. Any and all bids or offers may be rejected if there is a sound, documented reason.

Codes of Conduct

The Subrecipient shall maintain written standards of conduct governing the performance of its employees engaged in the award and administration of contracts. No employee, officer or agent shall participate in the selection, award or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict would arise when the employee, officer or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated, has a financial or other interest in a tangible personal benefit from a firm considered for a contract. The officers, employees and agents of the Subrecipient shall neither solicit nor accept gratuities, favors or anything of monetary value from contractors or parties to subcontracts. The standards of conduct must provide for disciplinary actions to be applied for violations of the standards by officers, employees or agents of the Subrecipient. (*See* 2 CFR § 200.318(c)(1).)

Business Hours

The Subrecipient shall have its offices open for business, with the entrance door open to the public, and at least one employee on site at all reasonable times for business. "Reasonable" shall be construed according to circumstances, but ordinarily shall mean normal business hours of 8:00 a.m. to 5:00 p.m., local time, Monday through Friday.

Licensing and Permitting

All contractors or employees hired by the Subrecipient shall have all current licenses and permits required for all of the particular work for which they are hired by the Subrecipient.

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The administration of resources awarded by DEO to the Subrecipient may be subject to audits and/or monitoring by DEO as described in this section.

MONITORING

In addition to reviews of audits conducted in accordance with 2 CFR 200 Subpart F - Audit Requirements, and section 215.97, F.S., as revised (see "AUDITS" below), monitoring procedures may include, but not be limited to, on-site visits by DEO staff, limited scope audits as defined by 2 CFR §200.425, or other procedures. By entering into this Agreement, the Subrecipient agrees to comply and cooperate with any monitoring procedures or processes deemed appropriate by DEO. In the event DEO determines that a limited scope audit of the Subrecipient is appropriate, the Subrecipient agrees to comply with any additional instructions provided by DEO staff to the Subrecipient regarding such audit. The Subrecipient further agrees to comply and cooperate with any inspections, reviews, investigations or audits deemed necessary by the Chief Financial Officer (CFO) or Auditor General.

AUDITS

PART I: FEDERALLY FUNDED. This part is applicable if the Subrecipient is a state or local government or nonprofit organization as defined in 2 CFR §200.1.

1. A Subrecipient that expends $750,000 or more in federal awards in its fiscal year must have a single or program-specific audit conducted in accordance with the provisions of 2 CFR 200, Subpart F - Audit Requirements. EXHIBIT 1 to this form lists the federal resources awarded through DEO by this agreement. In determining the federal awards expended in its fiscal year, the Subrecipient shall consider all sources of federal awards, including federal resources received from DEO. The determination of amounts of federal awards expended should be in accordance with the guidelines established in 2 CFR §§200.502-503. An audit of the Subrecipient conducted by the Auditor General in accordance with the provisions of 2 CFR §200.514 will meet the requirements of this Part.

2. For the audit requirements addressed in Part I, paragraph 1, the Subrecipient shall fulfill the requirements relative to auditee responsibilities as provided in 2 CFR §§200.508-512.

3. A Subrecipient that expends less than $750,000 in federal awards in its fiscal year is not required to have an audit conducted in accordance with the provisions of 2 CFR 200, Subpart F - Audit Requirements. If the Subrecipient expends less than $750,000 in federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of 2 CFR 200, Subpart F - Audit Requirements, the cost of the audit must be paid from non-federal resources (i.e., the cost of such an audit must be paid from Subrecipient resources obtained from other than federal entities).

PART II: STATE FUNDED. This part is applicable if the Subrecipient is a non-state entity as defined by Section 215.97(2), F.S.

1. In the event that the Subrecipient expends a total amount of state financial assistance equal to or in excess of $750,000 in any fiscal year of such Subrecipient (for fiscal years ending June 30, 2017, and thereafter), the Subrecipient must have a state single or project-specific audit for such fiscal year in accordance with section 215.97, F.S.; Rule Chapter 69I-5, F.A.C., State Financial Assistance; and Chapters 10.550 (local governmental entities) and 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. EXHIBIT 1 to this form lists the state financial assistance awarded through DEO by this agreement. In determining the state financial assistance expended in its fiscal year, the Subrecipient shall consider all sources of state financial assistance, including state financial assistance received from DEO, other state agencies, and other nonstate entities. State financial assistance does not include federal direct or pass-through awards and resources received by a nonstate entity for federal program matching requirements.

2. For the audit requirements addressed in Part II, paragraph 1, the Subrecipient shall ensure that the audit complies with the requirements of section 215.97(8), F.S. This includes submission of a financial reporting

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package as defined by section 215.97(2), F.S., and Chapters 10.550 (local governmental entities) and 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.

3. If the Subrecipient expends less than $750,000 in state financial assistance in its fiscal year (for fiscal years ending June 30, 2017, and thereafter), an audit conducted in accordance with the provisions of section 215.97, F.S., is not required. If the Subrecipient expends less than $750,000 in state financial assistance in its fiscal year and elects to have an audit conducted in accordance with the provisions of section 215.97, F.S., the cost of the audit must be paid from the nonstate entity's resources (i.e., the cost of such an audit must be paid from the Subrecipient's resources obtained from other than state entities).

PART III: OTHER AUDIT REQUIREMENTS

(NOTE: This part would be used to specify any additional audit requirements imposed by the State awarding entity that are solely a matter of that State awarding entity's policy (i.e., the audit is not required by Federal or State laws and is not in conflict with other Federal or State audit requirements). Pursuant to Section 215.97(8), F.S., State agencies may conduct or arrange for audits of state financial assistance that are in addition to audits conducted in accordance with Section 215.97, F.S. In such an event, the State awarding agency must arrange for funding the full cost of such additional audits.)

N/A

PART IV: REPORT SUBMISSION

1. Copies of reporting packages for audits conducted in accordance with 2 CFR 200, Subpart F - Audit Requirements, and required by Part I of this form shall be submitted, when required by 2 CFR § 200.512, by or on behalf of the Subrecipient directly to the Federal Audit Clearinghouse (FAC) as provided in 2 CFR § 200.1 and §200.512.

   The FAC's website provides a data entry system and required forms for submitting the single audit reporting package. Updates to the location of the FAC and data entry system may be found at the OMB website.

2. Copies of financial reporting packages required by Part II of this form shall be submitted by or on behalf of the Subrecipient directly to each of the following:

   a. DEO at each of the following addresses:

   Electronic copies (preferred):
   Audit@deo.myflorida.com

   or

   Paper (hard copy):
   Department Economic Opportunity
   MSC # 75, Caldwell Building
   107 East Madison Street
   Tallahassee, FL 32399-4126

   b. The Auditor General's Office at the following address:

   Auditor General
   Local Government Audits
   342 Claude Pepper Building, Room 401
   111 West Madison Street
   Tallahassee, Florida 32399-1450

   The Auditor General's website (https://flauditor.gov/) provides instructions for filing an electronic copy of a financial reporting package.

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3. Copies of reports or the management letter required by Part III of this form shall be submitted by or on behalf of the Subrecipient directly to:

Electronic copies (preferred):	or	Paper (hard copy):
Audit@deo.myflorida.com		Department Economic Opportunity MSC # 75, Caldwell Building 107 East Madison Street Tallahassee, FL. 32399-4126

4. Any reports, management letters, or other information required to be submitted DEO pursuant to this agreement shall be submitted timely in accordance with 2 CFR §200.512, section 215.97, F.S., and Chapters 10.550 (local governmental entities) and 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.

5. Subrecipients, when submitting financial reporting packages to DEO for audits done in accordance with 2 CFR 200, Subpart F - Audit Requirements, or Chapters 10.550 (local governmental entities) and 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, should indicate the date that the reporting package was delivered to the Subrecipient in correspondence accompanying the reporting package.

PART V: RECORD RETENTION. The Subrecipient shall retain sufficient records demonstrating its compliance with the terms of this Agreement for a period of five (5) years from the date the audit report is issued, or six (6) state fiscal years after all reporting requirements are satisfied and final payments have been received, whichever period is longer, and shall allow DEO, or its designee, CFO, or Auditor General access to such records upon request. The Subrecipient shall ensure that audit working papers are made available to DEO, or its designee, CFO, or Auditor General upon request for a period of six (6) years from the date the audit report is issued, unless extended in writing by DEO. In addition, if any litigation, claim, negotiation, audit, or other action involving the records has been started prior to the expiration of the controlling period as identified above, the records shall be retained until completion of the action and resolution of all issues which arise from it, or until the end of the controlling period as identified above, whichever is longer.

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Exhibit 1 to Attachment I – Funding Sources

Federal Resources Awarded to the Subrecipient Pursuant to this Agreement Consist of the Following:

Federal Awarding Agency:	U.S. Department of Housing and Urban Development
Federal Funds Obligated to Subrecipient:	*$7,000,000.00*
Catalog of Federal Domestic Assistance Title:	Community Development Block Grants/State's Program and Non-Entitlement Grants in Hawaii
Catalog of Federal Domestic Assistance Number:	14.228
Project Description: *This is not a research and development award.*	Funding is being provided to the City of Opa-Locka for a Community Flood Protection project involving the 127th Ave. canal, which is approximately 0.6 miles long, is located in the C-7 Canal Basin, and flows west to east discharging into the Spur Canal. The project will consist of canal dredging and restoration to reduce flood risk for the surrounding area. Canal will be stabilized by using a stacked canal bank stabilization (CBS) system.

Compliance Requirements Applicable to the Federal Resources Awarded Pursuant to this Agreement are as Follows:

Federal Program

1. The Subrecipient shall perform its obligations in accordance with Sections 290.0401- 290.048, F.S.
2. The Subrecipient shall perform its obligations in accordance with 24 CFR §§ 570.480 – 570.497.
3. The Subrecipient shall perform the obligations as set forth in this Agreement, including any attachments or exhibits thereto.
4. The Subrecipient shall perform the obligations in accordance with chapter 73C-23.0051(1) and (3), F.A.C.
5. The Subrecipient shall be governed by all applicable laws, rules and regulations, including, but not necessarily limited to, those identified in Award Terms & Conditions and Other Instructions of the Subrecipient's Notice of Subgrant Award/Fund Availability (NFA).

State Resources Awarded to the Subrecipient Pursuant to this Agreement Consist of the Following: *N/A*

Matching Resources for Federal Programs: *N/A*

Subject to Section 215.97, Florida Statutes: *N/A*

Compliance Requirements Applicable to State Resources Awarded Pursuant to this Agreement are as Follows: *N/A*

NOTE: Title 2 CFR § 200.331 and Section 215.97(5), F.S., require that the information about Federal Programs and State Projects included in Exhibit 1 and the Notice of Subgrant Award/Fund Availability be provided to the Subrecipient.

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Attachment J – Audit Compliance Certification

Email a copy of this form within 60 days of the end of each fiscal year in which this subgrant was open to audit@deo.myflorida.com.	
Subrecipient:	
FEIN:	Subrecipient's Fiscal Year:
Contact Name:	Contact's Phone:
Contact's Email:	

1. Did the Subrecipient expend state financial assistance, during its fiscal year that it received under any agreement (e.g., contract, grant, memorandum of agreement, memorandum of understanding, economic incentive award agreement, etc.) between the Subrecipient and the Department of Economic Opportunity (DEO)? ☐ Yes ☐ No

   If the above answer is yes, answer the following before proceeding to item 2.

   Did the Subrecipient expend $750,000 or more of state financial assistance (from DEO and all other sources of state financial assistance combined) during its fiscal year? ☐ Yes ☐ No

   If yes, the Subrecipient certifies that it will timely comply with all applicable State single or project-specific audit requirements of Section 215.97, Florida Statutes and the applicable rules of the Department of Financial Services and the Auditor General.

2. Did the Subrecipient expend federal awards during its fiscal year that it received under any agreement (e.g., contract, grant, memorandum of agreement, memorandum of understanding, economic incentive award agreement, etc.) between the Subrecipient and DEO? ☐ Yes ☐ No

   If the above answer is yes, also answer the following before proceeding to execution of this certification:

   Did the Subrecipient expend $750,000 or more in federal awards (from DEO and all other sources of federal awards combined) during its fiscal year? ☐ Yes ☐ No

   If yes, the Subrecipient certifies that it will timely comply with all applicable single or program-specific audit requirements of 2 CFR part 200, subpart F, as revised.

By signing below, I certify, on behalf of the Subrecipient, that the above representations for items 1 and 2 are true and correct.

Signature of Authorized Representative	Date
Printed Name of Authorized Representative	Title of Authorized Representative

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Attachment K – Subrecipient Enterprise Resource Application (SERA) Form

Attachment K will be provided after execution of this Agreement

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Appendix II to Part 200 - Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of $10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be affected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or

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under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended - Contracts and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689) - A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) - Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(J) See 200.323 – Procurement of Recovered Materials.

(K) See 200.216 – Prohibition on certain telecommunications and video surveillance services or equipment.

(L) See 200.322 – Domestic Preferences for procurements.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75888, Dec. 19, 2014; 85 FR 49577, Aug. 13, 2020]

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Attachment M

State of Florida
Department of Economic Opportunity

Federally Funded
Community Development Block Grant
Disaster Recovery (CDBG-MIT) Subrogation Agreement

This Subrogation and Assignment Agreement ("Agreement") is made and entered into by and between the City of Opa-Locka hereinafter referred to as "Subrecipient") and the State of Florida, Department of Economic Opportunity (hereinafter referred to as "DEO").

In consideration of Subrecipient's receipt of funds or the commitment by DEO to evaluate Subrecipient's application for the receipt of funds (collectively, the "Grant Proceeds") under the DEO Community Development Block Grant-Mitigation Program (the "CDBG-MIT Program") administered by DEO, Subrecipient hereby assigns to DEO all of Subrecipient's future rights to reimbursement and all payments received from any grant, subsidized loan, lawsuit or insurance policies of any type or coverage or under any reimbursement or relief program related to or administered by the Federal Emergency Management Agency ("FEMA") or the Small Business Administration ("SBA") (singularly, a "Disaster Program" and collectively, the "Disaster Programs") that was the basis of the calculation of Grant Proceeds paid or to be paid to Subrecipient under the CDBG-MIT Program and that are determined in the sole discretion of DEO to be a duplication of benefits ("DOB") as provided in this Agreement.

The proceeds or payments referred to in the preceding paragraph, whether they are from insurance, FEMA or the SBA or any other source, and whether or not such amounts are a DOB, shall be referred to herein as "Proceeds," and any Proceeds that are a DOB shall be referred to herein as "DOB Proceeds." Upon receiving any Proceeds, Subrecipient agrees to immediately notify DEO who will determine in its sole discretion if such additional amounts constitute a DOB. If some or all of the Proceeds are determined to be a DOB, the portion that is a DOB shall be paid to DEO, to be retained and/or disbursed as provided in this Agreement. The amount of DOB determined to be paid to DEO shall not exceed the amount received from the CDBG-MIT Program.

Subrecipient agrees to assist and cooperate with DEO to pursue any of the claims Subrecipient has against the insurers for reimbursement of DOB Proceeds under any such policies. Subrecipient's assistance and cooperation shall include but shall not be limited to allowing suit to be brought in Subrecipient's name(s) and providing any additional documentation with respect to such consent, giving depositions, providing documents, producing record and other evidence, testifying at trial and any other form of assistance and cooperation reasonably requested by DEO. Subrecipient further agrees to assist and cooperate in the attainment and collection of any DOB Proceeds that the Subrecipient would be entitled to under any applicable Disaster Program.

If requested by DEO, Subrecipient agrees to execute such further and additional documents and instruments as may be requested to further and better assign to DEO, to the extent of the Grant Proceeds paid to Subrecipient under the CDBG-MIT Program, the Policies, any amounts received under the Mitigation Programs that are DOB Proceeds and/or any rights thereunder, and to take, or cause to be taken, all actions and to do, or cause to be done, all things requested by DEO to consummate and make effective the purposes of this Agreement.

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Subrecipient explicitly allows DEO to request of any company with which Subrecipient held insurance policies, or FEMA or the SBA or any other entity from which Subrecipient has applied for or is receiving Proceeds, any non-public or confidential information determined to be reasonably necessary by DEO to monitor/enforce its interest in the rights assigned to it under this Agreement and give Subrecipient's consent to such company to release said information to DEO.

If Subrecipient (or any lender to which DOB Proceeds are payable to such lender, to the extent permitted by superior loan documents) hereafter receives any DOB Proceeds, Subrecipient agrees to promptly pay such amounts to DEO, if Subrecipient received Grant Proceeds under the CDBG-MIT Program in an amount greater than the amount Subrecipient would have received if such DOB Proceeds had been considered in the calculation of Subrecipient's award.

In the event that the Subrecipient receives or is scheduled to receive any subsequent Proceeds, Subrecipient shall pay such subsequent Proceeds directly to DEO, and DEO will determine the amount, if any, of such subsequent Proceeds that are DOB Proceeds ("Subsequent DOB Proceeds"). Subsequent Proceeds in excess of Subsequent DOB Proceeds shall be returned to the Subrecipient. Subsequent DOB Proceeds shall be disbursed as follows:

1. If the Subrecipient has received full payment of the Grant Proceeds, any Subsequent DOB Proceeds shall be retained by DEO.
2. If the Subrecipient has received no payment of the Grant Proceeds, any Subsequent DOB Proceeds shall be used by DEO to reduce payments of the Grant Proceeds to the Subrecipient, and all Subsequent DOB Proceeds shall be returned to the Subrecipient.
3. If the Subrecipient has received a portion of the Grant Proceeds, any Subsequent DOB Proceeds shall be used, retained and/or disbursed in the following order: (A) Subsequent DOB Proceeds shall first be used to reduce the remaining payments of the Grant Proceeds, and Subsequent DOB Proceeds in such amount shall be returned to the Subrecipient; and (B) any remaining Subsequent DOB Proceeds shall be retained by DEO.
4. If DEO makes the determination that the Subrecipient does not qualify to participate in the CDBG-MIT Program or the Subrecipient determines not to participate in the CDBG-MIT Program, the Subsequent DOB Proceeds shall be returned to the Subrecipient, and this Agreement shall terminate.

Once DEO has recovered an amount equal to the Grant Proceeds paid to Subrecipient, DEO will reassign to Subrecipient any rights assigned to DEO pursuant to this Agreement.

Subrecipient represents that all statements and representations made by Subrecipient regarding Proceeds received by Subrecipient shall be true and correct as of the date of the signing of this Agreement.

Warning: Any person who intentionally or knowingly makes a false claim or statement to HUD may be subject to civil or criminal penalties under 18 U.S.C. 287, 1001 and 31 U.S.C. 3729.

Remainder of this page is intentionally left blank

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The person executing this Agreement on behalf of the Subrecipient hereby represents that he\she has received, read, and understands this notice of penalties for making a false claim or statement regarding Proceeds received by Subrecipient.

In any proceeding to enforce this Agreement, DEO shall be entitled to recover all costs of enforcement, including actual attorney's fees.

	CITY OF OPA-LOCKA, FLORIDA	DEPARTMENT OF ECONOMIC OPPORTUNITY
By	Signature	DocuSigned by: 8D7A4D05416240F... Signature
	Veronica Williams	Dane Eagle
Title	Mayor	Secretary
Date	12/06/2022	12/14/2022

Environmental Review
for Activity/Project that is Exempt or Categorically Excluded Not Subject to Section 58.5
Pursuant to 24 CFR Part 58.34(a) and 58.35(b)

This is a suggested format that may be used by Responsible Entities to document completion of an Exempt or Categorically Excluded Not Subject to Section 58.5 environmental review.

Project Information

Project Name: NW 127th Street Canal Bank Stabilization

Responsible Entity: City of Opa-locka

Grant Recipient (if different than Responsible Entity): Click or tap here to enter text.

State/Local Identifier: MT123

Preparer: Adelina Gross

Certifying Officer Name and Title: John H. Taylor, Mayor

Consultant (if applicable): Click or tap here to enter text.

Project Location: NW 127th Street, Opa-locka FL 33054

Description of the Proposed Project [24 CFR 58.32; 40 CFR 1508.25]**:**
The project is located in the NW 127th Street Canal is approximately 0.6 miles long, is located in the C-7 (Little River) Canal Basin between NW 37th Ave and 32nd Ave along NW 127th Street. The NW 127th Street Canal begins at NW 47th Avenue and flows west to east discharging into the Spur Canal. The Spur Canal flows primarily south and makes an open connection with the C-7 Canal at NW 107th Street.
The three reaches that comprise the N.W. 127th Street Canal system are as follows:

- Segment #7- Flows 5,200 feet from Cairo Lane to the confluence of the Spur Canal, which is 400 feet of NW 27th Avenue.
- Segment #8- Flows from NW 42nd Avenue (Le Jeune Road) 3,200 feet to Cairo Lane.
- Segment #9- Begins at N.W 47th Avenue on the east side of Gratigny Parkway and flows east to N.W. 42nd Avenue for 2,100 feet.
    - Proposed improvements:
- 1) Construct steel sheet pile wall with concrete cap along northern bank of the canal at 20 feet offset from the canal R/W line. The improvements will facilitate 20' wide maintenance berm along most
- of the northern properties.
- 2) Construct steel sheet pile wall with concrete cap along southern bank of the canal at 5 feet offset from the canal R/W line. The improvements will prevent further erosion along the canal bank.

- 3) Dredge the canal to have a consistent canal bottom elevation of (-)15.00 feet NAVD between the
- proposed sheet pile walls.

Level of Environmental Review Determination:

☒ Activity/Project is Exempt per 24 CFR 58.34(a): *(choose all that apply below)*

x	1.	Environmental and other studies, resource identification and the development of plans and strategies;
	2.	Information and financial services;
x	3.	Administrative and Management Activities;
	4.	Public services that will not have a physical impact or result in any physical changes, including but not limited to, services concerned with employment, crime prevention, child-care, health, drug abuse, education, counseling, energy conservation and welfare or recreational needs;
x	5.	Inspections and testing of properties for hazards or defects;
	6.	Purchase of insurance;
	7.	Purchase of tools;
x	8.	Engineering or design costs;
	9.	Technical assistance and training;
x	10.	Assistance for temporary or permanent improvements that do not alter environmental conditions and are limited to protection, repair, or restoration activities necessary only to control or arrest the effects from disasters or imminent threats to public safety including those resulting from physical deterioration; *{This exemption applies only in certain circumstances; HUD has released clarification regarding the use and applicability of this exemption. Documentation of Compliance with 24 CFR Part 58.6 required when this exemption is used.}*
	11.	Payment of principal and interest on loans made or obligations guaranteed by HUD;
	12.	Any of the categorical exclusions listed in Sec. 58.35(a) provided that if there are no circumstances that require compliance with any other federal laws and authorities cited in Section 58.5. *{Before you can consider activities listed in Sec. 58.35(a) as exempt activities, you must complete the categorical exclusion checklist and related review process. Documentation of Compliance with 24 CFR Part 58.6 is required}*

☐ Activity/Project is Categorically Excluded Not Subject To §58.5 per 24 CFR 58.35(b): *(choose all that apply below)*

	1.	Tenant-based rental assistance;
	2.	Supportive services including, but not limited to, health care, housing services, permanent housing placement, day care, nutritional services, short-term payments for rent/mortgage/utility costs, and assistance in gaining access to local, state, and federal government benefits and services;
	3.	Operating cost including maintenance, security, operations, utilities, furnishings, equipment, supplies, staff training and recruitment and other incidental costs;
	4.	Economic development activities, including but not limited to, equipment purchase, inventory financing, interest subsidy, operating expenses and similar costs not associated with construction or expansion of existing operations;
	5.	Activities to assist homebuyers to purchase existing dwelling units or dwelling units under construction, including closing costs and down payment assistance, interest buydowns, and similar activities which result in transfer of title;
	6.	Affordable housing pre-development costs including legal, consulting, developer and other costs related to obtaining site options, project financing, administrative costs and fees for loan commitments, zoning approvals, and other related activities which do not have a physical impact;
	7.	Approval of supplemental assistance (including insurance or guarantee) to a project previously approved under this part, if the approval is made by the same responsible entity that conducted the environmental review on the original project and re-evaluation of the environmental findings is not required under §58.47.

Funding Information

Grant Number	HUD Program	Funding Amount
MT123	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Estimated Total HUD Funded Amount: Click or tap here to enter text.

This project anticipates the use of funds or assistance from another Federal agency in addition to HUD in the form of (if applicable)**:** Click or tap here to enter text.

Estimated Total Project Cost (indicate all HUD and non-HUD funds) [24 CFR 58.32(d)]**:** Click or tap here to enter text.

Compliance with 24 CFR §50.4 and §58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4 and 58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §58.6		
Airport Runway Clear Zones and Accident Potential Zones 24 CFR Part 51 Subpart D	Yes ☐ No ☒	This project does not involve the sale or acquisition of existing property and is in compliance with the HUD's Airport Hazard regulations without further evaluation
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☐	Click or tap here to enter text.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☒ No ☐	*This funding is for flood mitigation project is located under the floodplain and covered under the City adopted insurance*

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.

Preparer Signature: _____

Date:Click or tap to enter a date.

Preparer Name/Title/Organization: Click or tap here to enter text.

Responsible Entity Agency Official Signature: _____

Date: Click or tap to enter a date.

RE Name/Title: Click or tap here to enter text.

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Sponsored by: Interim City Manager

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE CITY MANAGER TO PIGGYBACK THE CITY OF MIAMI CONTRACT WITH H&R PAVING, INC. FOR QUALIFIED PROFESSIONAL SERVICES FOR PAVEMENT RESURFACING (CITY OF MIAMI IFB #1115382(28), AND ENTER INTO AN AGREEMENT WITH H&R PAVING, INC FOR PAVEMENT RESURFACING THROUGHOUT THE CITY, FOR PHASE V OF THE CITY SIDEWALK INSTALLATION PROJECT, IN AN AMOUNT NOT TO EXCEED TWO HUNDRED FIFTY-EIGHT THOUSAND, FOUR HUNDRED THIRTY SIX DOLLARS AND EIGHTEEN CENTS ($258,436.18) PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Opa-Locka ("City") initiated the Sidewalk Installation Project ("Project") to install new sidewalks in all areas within the City lacking sidewalks. Staff has divided the Project into phases based on priority needs in order to spread out the fiscal impact over time; and

WHEREAS, Staff has developed a scope for Phase V of the Project and received a proposal for this scope of work for Two Hundred Fifty-Eight Thousand, Four Hundred Thirty Six Dollars and Eighteen Cents ($258,436.18); and

WHEREAS, the City of Miami previously awarded a contract to H&R Paving Inc. for pavement resurfacing services (attached as Exhibit "A"), pursuant to its Invitation for Bid (IFB) No. 1115382(28), for a three year period commencing March 22, 2021 through March 21, 2024; and

WHEREAS, pursuant to Section 2-318(3) of the City's Purchasing Code (as approved by Ordinance 2020-07) the City may purchase and acquire under contracts with the federal government, the State of Florida or its political subdivisions and also municipal co-operative purchasing organizations and programs and when the City Manager has determined that the prices of the original contract are competitive and reasonable; and

WHEREAS, the City received a proposal from H&R Paving, Inc., attached hereto as Exhibit "B", for Two Hundred Fifty-Eight Thousand, Four Hundred Thirty Six Dollars and Eighteen Cents ($258,436.18) for pavement resurfacing services, within the City, as provided herein; and

WHEREAS, the City Commission finds that it is in the best interests of the City to piggyback the City of Miami contract with H&R Paving Inc., attached hereto as Exhibit "A", in order to benefit from already negotiated rates and enter into an agreement, attached hereto as Exhibit "C", for pavement resurfacing services, throughout the City for Phase V of the City Sidewalk Installation Project, as provided herein, in an amount not to exceed Two Hundred Fifty-Eight Thousand, Four Hundred Thirty Six Dollars and Eighteen Cents ($258,436.18).

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka, Florida hereby authorizes the City Manager to piggyback on the City of Miami contract (IFB #1115382(28)) with H&R Paving Inc. for qualified professional services for pavement resurfacing services and enter into an Agreement with H&R Paving, Inc., attached hereto as Exhibit "C", for pavement resurfacing services, throughout the City of Opa-Locka, for Phase V of the City Sidewalk Installation Project, in an amount not to exceed Two Hundred Fifty-Eight Thousand, Four Hundred Thirty Six Dollars and Eighteen Cents ($258,436.18).

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager, or the City Manager's designee, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

Section 4. EFFECTIVE DATE.
This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

DocuSign Envelope ID: 7076AF06-8092-4B2E-A24E-37583E369778

City of Opa-locka
Agenda Cover Memo

Department Manager:	Adelina Gross			**Department Manager Signature:**	DocuSigned by: C46C07C1E8DE492...			
City Manager:	Darvin Williams			**CM Signature:**				
Commission Meeting Date:	01.10.2024		**Item Type:** *(Enter X in the box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in the box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in the box)*		**1st Reading**		**2nd Reading**	
			Public Hearing: *(Enter X in the box)*		**Yes**	**No**	**Yes**	**No**
						X		X
Funding Source: *Account#:* **44-541835**	*(Enter Fund & Dept.)* CIP-People Transportation Plan		**Advertising Requirement:** *(Enter X in the box)*		**Yes**		**No** X	
Contract/P.O. Required: *(Enter X in the box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**		*N/A*			
	X							
Strategic Plan Related *(Enter X in the box)*	**Yes**	**No**	**Strategic Plan Priority Area:** Enhance Organization ☐ Bus. & Economic Development ■ Public Safety ■ Quality of Education ☐ Qual. of Life & City Image ■ Communication ☐		**Strategic Plan Obj./Strategy:** (*list the specific objective/strategy this item will address)*			
	X							
Sponsor Name:	City Manager		**Department:** **Capital Improvements Program**		City Manager			

Short Title:

Sidewalk Installation Phase IV

Staff Summary:

The City initiated the Sidewalk Installation Project to install new sidewalks in the City in areas lacking sidewalks. The staff has divided the project into phases based on prioritized needs to spread out the fiscal impact over time. The staff has developed a scope for Phase V and received a proposal for this scope for $258,436.18.

Staff recommends continuing this project as it will enhance the City's image as well as improve walkability and address pedestrian safety.

DocuSign Envelope ID: 7076AF06-8092-4B2E-A24E-37583E369778

Therefore, Staff is requesting approval from the City Commission to authorize the City Manager to piggyback City of Miami IFB 1115382 for PAVEMENT RESURFACING SERVICES and accept the proposal from H&R Paving, Inc. for completion of Phase IV.

Financial Impact:

Account	Description	Available	Project	Remaining Balance
44-541835	PTP-Sidewalks	$350,000	$258,436.18	$91,563.82

Proposed Action:

Staff recommends the City Commission's approval of this item to enhance City walkability and to address pedestrian safety issues.

Attachment(s):

Agenda
Proposal provided by H&R Paving, Inc.
Street Map
City of Miami NTP Letter and BID form Package in response to the IFB 1115382
Opa-locka Piggyback Contract.

CITY OF OPA-LOCKA AGREEMENT FOR SIDEWALK INSTALLATION SERVICES

Piggyback City of Miami Invitation for Bid (IFB) 1115382 for Pavement Resurfacing Services

This Agreement is made this ____ day of _____, 2023, between the City of Opa-Locka, a municipal corporation organized and existing under the laws of the State of Florida and whose address is 780 Fisherman Street, Opa-Locka, Florida 33054 (the **"City"),** and H&R Paving, Inc. whose address is 1955 N.W. 110 Avenue, Miami, FL 33172 (the **"Contractor").**

WITNESSETH

WHEREAS, the Contractor desires to enter into this Agreement ("Agreement") with City to provide pavement resurfacing services to the City (Sidewalk Installation – Phase V) (the "Project"); and

WHEREAS, the parties desire to incorporate the terms and conditions of the solicitation and contractual arrangement between City of Miami and the Contractor, as set forth in the City of Miami Invitation for Bid for Pavement Resurfacing Services ("the IFB"); and

WHEREAS, the City Code provides authority for the City to select and contract through the use of the competitive bid process of another government entity as an exception to the otherwise required formal bidding process.

NOW THEREFORE, in consideration of the mutual covenants set forth in this Agreement, the receipt and sufficiency of which is acknowledged, the parties agree as follows:

Section 1. Term. The term of this Agreement commences upon fully execution of this agreement and continues through March 21,2024, unless terminated earlier by its terms. The City shall have the option to renew for two (2) additional one-year terms.

Section 2. Contract Terms. The Contractor agrees to provide the City with pavement resurfacing services in accordance with the City's requirements as set forth herein and the Standard Contract between City of Miami and the Contractor dated on or about March 11, 2021 (the "City of Miami Agreement"), attached hereto and incorporated herein as Exhibit "A". The exhibits are incorporated into this Agreement for all purposes, and are collectively referred to as the "Contract Documents", and represent the entire agreement between the parties. In the event of conflict between or among the Contract Documents, the order of priority shall be: this Agreement, the City of Miami Agreement and the Contractor's accepted proposal.

Section 3. Scope of Work

The following provisions are included:

A City shall pay Contractor no more than the unit prices set forth in the Contract Documents and in accordance with the provisions of the Contract Documents. If the City requires services not covered by unit prices already made a part of the Contract Documents, the Contractor shall submit a detailed written proposal to the authorized City representative before providing any such services. For these purposes, Adelina Gross as Capital Improvements Program Manager, shall be the City Representative and may be reached at (305)953-2868 Ext. 3001.

B. If permits are required, Contractor shall submit complete and accurate permit applications to all applicable permitting agencies within ten work days of receiving from the City all documents necessary to file such permit applications. The City shall pay all permit and related fees directly to the permitting agencies, including any permit fees charged by the City.

C. The City of Opa-Locka shall be substituted for the City of Miami with regard to any and all provisions of the City of Miami Agreement, the IFB, and the Contractor's bid, including by example and not limitation, with regard to bond requirements, insurance, indemnification, licensing, termination, default and ownership of documents. All recitals, representations, and warranties of Contractor made in those documents are restated as if set forth fully herein,made for the benefit of the City, and incorporated herein.

D. Contractor shall not commence work on the Project unless and until the

requirements for insurance have been fully met by Contractor and appropriate evidence thereof, in the City's sole discretion, has been provided to and approved by the City.

Section 4. Assignment. Neither party may assign its rights or obligations under this Agreement without the consent of the other.

Section 5. Notice. Notice hereunder shall be provided in writing by certified mail, return receipt requested, or customarily used overnight transmission with proof of delivery, to the following parties, with mandatory copies, as provided below:

For City: Darvin Williams, Interim City Manager
City of Opa-Locka
780 Fisherman Street
Opa-Locka, Florida, Florida 33054

Copy lo: Burnadette Norris-Weeks, Esq.
City Attorney
Burnadette Norris-Weeks, P.A.
401 NW 7th Avenue
Fort Lauderdale, Florida 33311

For Contractor: Raul Gonzalez
1955 N. W. 110 AVE
Miami, FL 33172

Section 5. Severability. This Agreement sets forth the entire agreement between Contractor and City with respect to the subject matter of this Agreement. This Agreement supersedes all prior and contemporaneous negotiations, understandings and agreements, written or oral, between the parties. This Agreement may not be modified except by the parties' mutual agreement set forth in writing and signed by the parties.

IN WITNESS WHEREOF, the parties hereto have accepted, made, and executed this Agreement upon the terms and conditions above stated on the day and year first above written.

CITY: City of Opa-Locka

Date:_____

By:_____
Darvin Williams, Interim City Manager

APPROVED AS TO FORM AND
LEGAL SUFFICIENCYFOR THE USE
OF AND RELIANCE
BY THE CITY OF OPA-LOCKA ONLY:

By:_____
City Attorney
Burnadette Norris-Weeks, P.A.

By:_____
Joanna Flores, City Clerk

CONTRACTOR:
H&R Paving, Inc.

By: _____ Witness: _____

_____ _____
PRINT NAME

Date:_____

_____
TITLE

Date:_____

EXHIBIT “A”

City of Miami

Invitation for Bid (IFB)

Procurement Department

Miami Riverside Center

444 SW 2nd Avenue, 6th Floor

Miami, Florida 33130

Web Site Address: www.miamigov.com/procurement

IFBNumber:	**1115382**
Title:	**Invitation for Bid for Pavement Resurfacing Services**
Issue Date/Time:	**11-SEP-2020**
IFBClosing Date/Time:	**09-OCT-2020 @ 15:00:00**
Pre-Bid/Pre-Proposal Conference:	**Voluntary**
Pre-Bid/Pre-Proposal Date/Time:	**September 18, 2020 at 10:00 AM**
Pre-Bid/Pre-Proposal Location:	**Virtual**
Deadline for Request for Clarification:	**September 24, 2020 at 2:00 PM**
Contracting Officer:	**Gray, Tahlia**
Hard Copy Submittal Location:	**NO HARD COPY SUBMITTALS PERMITTED**
Contracting Officer E-Mail Address:	**tgray@miamigov.com**
Contracting Officer Facsimile:	**305-400-5019**

Certification Statement

Please quote on this form, if applicable, net prices for the item(s) listed. Return signed original and retain a copy for your files. Prices should include all costs, including transportation to destination. The City reserves the right to accept or reject all or any part of this submission. Prices should be firm for a minimum of 180 days following the time set for closing of the submissions.

In the event of errors in extension of totals, the unit prices shall govern in determining the quoted prices.

We (I) certify that we have read your solicitation, completed the necessary documents, and propose to furnish and deliver**, F.O.B. DESTINATION**, the items or services specified herein.

The undersigned hereby certifies that neither the contractual party nor any of its principal owners or personnel have been convicted of any of the violations, or debarred or suspended as set in section 18-107 or Ordinance No. 12271.

All exceptions to this submission have been documented in the section below (refer to paragraph and section).

EXCEPTIONS:

We (I) certify that any and all information contained in this submission is true; and we (I) further certify that this submission is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a submission for the same materials, supplies, equipment, or service, and is in all respects fair and without collusion or fraud. We (I) agree to abide by all terms and conditions of this solicitation and certify that I am authorized to sign this submission for the submitter. Please print the following and sign your name:

PROPOSER NAME: _____

ADDRESS: _____

PHONE: _____ FAX: _____

EMAIL: _____ CELL(Optional): _____

SIGNED BY: _____

TITLE: _____ DATE: _____

FAILURE TO COMPLETE, SIGN, AND RETURN THIS FORM SHALL DISQUALIFY THIS RESPONSE.

Certifications

Legal Name of Firm:

_____

Entity Type: Partnership, Sole Proprietorship, Corporation, etc.

_____

Year Established:

_____

Office Location: City of Miami, Miami-Dade County, or Other

_____

Business Tax Receipt/Occupational License Number:

_____

Business Tax Receipt/Occupational License Issuing Agency:

_____

Business Tax Receipt/Occupational License Expiration Date:

_____

Will Subcontractor(s) be used? (Yes or No)

_____

Please list and acknowledge all addendum/addenda received. List the addendum/addenda number and date of receipt (i.e. Addendum No. 1, 7/1/17). If no addendum/addenda was/were issued, please insert N/A.

_____

If Bidder has a Local Office, as defined under Chapter 18/Article III, Section 18-73 of the City Code, has Bidder filled out, notarized, and included with its bid response the "City of Miami Local Office Certification" form? YES OR NO? (The City of Miami Local Office Certification form is located in the Attachments Section of this solicitation.)

_____

Line: **1**

Description**: BIDDERS ARE NOT REQUIRED TO ENTER A UNIT PRICE ON THIS LINE. BIDDERS SHALL SUBMIT THEIR BID PRICES UTILIZING ATTACHMENT E - BID PRICE SHEET, LOCATED IN THE ATTACHMENTS SECTION OF THIS SOLICITATION.**

Category: **98852-00**
Unit of Measure: **Each**

Unit Price: $_____ Number of Units: **1** Total: $_____

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Terms and Conditions

1. General Terms and Conditions

1.1. GENERAL TERMS AND CONDITIONS

Intent: The General Terms and Conditions described herein apply to the acquisition of goods/equipment/services with an estimated aggregate cost of $25,000.00 or more.

Definition: A formal solicitation is defined as issuance of a/an Invitation for Bid (IFB), Request for Proposals (RFP), Request for Qualifications (RFQ), or Request for Letters of Interest (RFLI) pursuant to the City of Miami Procurement Code and/or Florida Law, as amended. Formal Solicitation and Solicitation shall be defined in the same manner herein.

1.1. ACCEPTANCE OF GOODS, EQUIPMENT OR SERVICES - Any good(s), equipment or services delivered under this formal solicitation, if applicable, shall remain the property of the seller until a physical inspection and actual usage of the good is made, and thereafter is accepted as satisfactory to the City. It must comply with the terms herein and be fully in accordance with specifications and of the highest quality. In the event the goods/equipment supplied to the City are found to be defective or does not conform to specifications, the City reserves the right to cancel the order upon written notice to the Contractor and return the product to the Contractor at the Contractor's expense. In terms of this Solicitation the use of the word "services" includes without limitation professional and personal services as that term professional and personal services is defined by the City of Miami Procurement Ordinance and as set forth in the Definitions Section 18-73 of the City Code.

1.2. ACCEPTANCE OF OFFER -Subject to prior occurrence of all condition's precedent set forth in Section 1.88, The signed or electronic submission of your solicitation response shall be considered an offer on the part of the Proposer; such offer shall be deemed accepted upon the occurrence of all conditions precedent and issuance by the City of a purchase order or notice to proceed, as applicable. In summation, execution of a Professional Services Agreement and/or Agreement, approval by a referendum as stated in this RFP, and issuance by the City of a purchase order, and/or notice to proceed, as applicable.

1.3. ACCEPTANCE/REJECTION -The City reserves the right to accept or reject any or all responses or parts of after opening/closing date and request re-issuance on the goods/services described in the formal solicitation. In the event of such rejection, the Director of Procurement shall notify all affected Proposers and make available a written explanation for the rejection. The City also reserves the right to reject:

1. the response of any Proposer who has previously failed to properly perform under the terms and conditions of a Professional Services Agreement ("PSA") and/or Agreement,

2.Failed to deliver on time contracts of a similar nature,

3. Who is not in a position to perform the requirements defined in this formal solicitation

4. Who has been debarred,

5.Who is on the convicted vendors list,

6.Who is indebted to the City,

7.Who is otherwise determined to be non- responsive or non-responsible.

The City further reserves the right to waive any irregularities, minor informalities, or technicalities in any or all responses and may, at its discretion, re-issue this formal solicitation.

1.4. ADDENDA -It is the Proposer's responsibility to ensure receipt of all Addenda. Addenda are available on the BidSync website.

1.5. ALTERNATE RESPONSES WILL NOT BE CONSIDERED.

1.6. ASSIGNMENT - Contractor agrees not to subcontract, assign, transfer, convey, sublet, or otherwise dispose of the resulting Contract, or any or all of its right, title or interest herein, without the City of Miami's prior written consent.

1.7. ATTORNEY'S FEES - In connection with any litigation, mediation and arbitration arising out of this Contract, each party shall bear their own attorney's fees through and including appellate litigation and any post-judgment proceedings.

1.8. AUDIT RIGHTS AND RECORDS RETENTION - The Successful Proposer agrees to provide access at all reasonable times to the City, or to any of its duly authorized representatives, to any books, documents, papers, and records of Contractor which are directly pertinent to this formal solicitation, for the purpose of audit, examination, excerpts, and transcriptions. The Successful Proposer shall maintain and retain any and all of the books, documents, papers and records pertinent to the Contract for three (3) years after the City makes final payment and all other pending matters are closed. Contractor's failure to or refusal to comply with this condition shall result in the immediate cancellation of this contract by the City. The audit and inspection provisions set forth in Sections 18-100

to 18-102, City Code, are deemed as being incorporated by reference herein as set forth in full.

1.9. AVAILABILITY OF CONTRACT STATE-WIDE - Any governmental, not-for-profit, or quasi-governmental entity in the State of Florida, may avail itself of this Contract and purchase any, and all goods/services, specified herein from the Successful Proposer at the Contract price(s) established herein, when permissible by Federal, State, and local laws, rules, and regulations.

Additionally, any governmental entity outside of the State of Florida but, within the Continental United States of America, may avail itself to this Contract and purchase any and all goods/services, specified herein from the Successful Proposer at the Contract price(s) established herein, when permissible by Federal, State, and local laws, rules, and regulations.

Each governmental, not-for-profit or quasi-governmental entity which uses this Formal Solicitation and resulting Contract will establish its own Contract, place its own orders, issue its own purchase orders, be invoiced there from and make its own payments, determine shipping terms and issue its own exemption certificates as required by the Successful Proposer.

1.10. AWARD OF CONTRACT:

A.The PSA and/or Agreement, the Formal Solicitation, the Proposer's response, any addenda issued, and the blanket purchase order shall constitute the entire contract, unless modified in accordance with any ensuing amendment or addenda.

B.The award of this contract may be preconditioned on the subsequent submission of other documents as specified in the Special Conditions or Technical Specifications. Proposer shall be in default of its contractual obligation if such documents are not submitted in a timely manner and in the form required by the City. Where Proposer is in default of these contractual requirements, the City, through action taken by the Department of Procurement, will void its acceptance of the Proposer's Response and may accept the Response from the next lowest responsive, responsible Proposal most advantageous to the City or re-solicit the City's requirements. The City, at its sole discretion, may seek monetary restitution from Proposer and its proposal bond or guaranty, if applicable, as a result of damages or increased costs sustained as a result of the Proposer's default.

C.The term of the contract shall be specified in one of three documents which shall be issued to the Successful Proposer. These documents may either be a blanket purchase order, notice of award and/or contract award sheet.

D.The City reserves the right to automatically extend this contract for up to one hundred twenty (120) calendar days beyond the stated contract term in order to provide City departments with continual service and supplies while a new contract is being solicited, evaluated, and awarded. If the right is exercised, the City shall notify the Proposer, in writing, of its intent to extend the contract at the same price, terms and conditions for a specific number of days.

Additional extensions over the first one hundred twenty (120) day extension may occur, if, the City and the Successful Proposer are in mutual agreement of such extensions.

E.Where the contract involves a single shipment of goods to the City, the contract term shall conclude upon completion of the expressed or implied warranty periods.

F.An PSA and/or Agreement shall be awarded to the Proposer by the City Commission based upon the minimum qualification requirements reflected herein. As a result of a RFP, RFQ, or RFLI, the City reserves the right to execute or not execute, as applicable, an PSA and/or Agreement with the Proposer, whichever is determined to be in the City's best interests. Such PSA and/or Agreement which will be furnished by the City, will contain certain terms as are in the City's best interests, and will be subject to approval as to legal form by the City Attorney. All conditions precedent identified in Section 1.88 before any Agreement is binding.

1.11.BID BOND/ BID SECURITY - A cashier's or certified check, or a Bid Bond signed by a recognized surety company that is licensed to do business in the State of Florida, payable to the City of Miami, for the amount bid is required from all Proposers, if so indicated under the Special Conditions. This check or bond guarantees that the Proposer will accept the order or contract/agreement, as proposed, if it is awarded to the Proposer. Proposer shall forfeit proposal deposit to the City should the City award the contract/agreement to the Proposer and if Proposer fails to accept the award. The City reserves the right to reject any and all surety tendered to the City. Proposal deposits are returned to unsuccessful Proposers within ten (10) days after the award and Successful Proposer's acceptance of award. If sixty (60) days have passed after the date of the formal solicitation closing date, and no contract has been awarded, all deposits will be returned on demand.

1.12.RESPONSE FORM (HARDCOPY FORMAT) - All forms should be completed, signed and submitted accordingly.

1.13.BID SECURITY FORFEITED LIQUIDATED DAMAGES - Failure to execute a PSA and/or Agreement and/or file an acceptable Performance Bond, when required, as provided herein, shall be just cause for the annulment of the award and the forfeiture of the Bid Security to the City, which forfeiture shall be considered, not as a penalty, but in mitigation of damages sustained. Award may then be negotiated with the next highest ranked responsive and responsible Proposal most advantageous to the City or all responses may be rejected.

1.14.BRAND NAMES - If and wherever in the specifications brand names, makes, models, names of any manufacturers, trade names, or Proposer catalog numbers are specified, it is for the purpose of establishing the type, function, minimum standard of design, efficiency, grade or quality of goods only. When the City does not wish to rule out other competitors' brands or makes, the phrase "OR EQUAL" is added. When bidding/proposing an approved equal, Proposers will submit, with their response, complete sets of necessary data (factory information sheets, specifications, brochures, etc.) in order for the City to evaluate and determine the equality of the item(s) bid/proposed. The City shall be the sole judge of equality and its decision shall be final. Unless otherwise

specified, evidence in the form of samples may be requested if the proposed brand is other than specified by the City. Such samples are to be furnished after formal solicitation opening/closing only upon request of the City. If samples should be requested, such samples must be received by the City no later than seven (7) calendar days after a formal request is made.

1.15.CANCELLATION - The City reserves the right to cancel all formal solicitations before its opening/closing. In the event of proposal cancellation, the Director of Procurement shall notify all prospective Proposers and make available a written explanation for the cancellation.

1.16.CAPITAL EXPENDITURES - Proposer understands that any capital expenditures that the firm makes, or prepares to make, in order to deliver/perform the goods/services required by the City, is a business risk which the Contractor must assume. The City will not be obligated to reimburse amortized or unamortized capital expenditures, or to maintain the approved status of any Contractor. If Contractor has been unable to recoup its capital expenditures during the time it is rendering such goods/services, it shall not have any claim upon the City.

1.17.CITY NOT LIABLE FOR DELAYS - It is further expressly agreed that in no event shall the City be liable for, or responsible to, the Proposer/Consultant, any sub-contractor/sub-consultant, or to any other person for, or on account of, any stoppages or delay in the work herein provided for by injunction or other legal or equitable proceedings or on account of any delay for any cause over which the City has no control.

1.18.COLLUSION -Proposer, by submitting a response, certifies that its response is made without previous understanding, agreement or connection either with any person, firm or corporation submitting a response for the same items/services or with the City of Miami's Procurement Department or initiating department. The Proposer certifies that its response is fair, without control, collusion, fraud or other illegal action. Proposer certifies that it is in compliance with the Conflict of Interest and Code of Ethics Laws. The City will investigate all potential situations where collusion may have occurred, and the City reserves the right to reject any and all responses where collusion may have occurred.

1.19. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS - Contractor understands that contracts between private entities and local governments are subject to certain laws and regulations, including laws pertaining to public records, conflict of interest, records keeping, competitive solicitations etc., et. al., as applicable. City and Contractor agree to comply with and observe all applicable laws, codes and ordinances as that may in any way affect the goods or equipment offered, including but not limited to:

A.Executive Order 11246, which prohibits discrimination against any employee, applicant, or client because of race, creed, color, national origin, sex, or age with regard to, but not limited to, the following: employment practices, rate of pay or other compensation methods, and training selection.

B.Occupational, Safety and Health Act (OSHA), as applicable to this Formal Solicitation.

C.The State of Florida Statutes, Section 287.133(3)(A) on Public Entity Crimes.

D.Environment Protection Agency (EPA), as applicable to this Formal Solicitation.

E.Uniform Commercial Code (Florida Statutes, Chapter 672).

F.Americans with Disabilities Act of 1990, as amended.

G.National Institute of Occupational Safety Hazards (NIOSH), as applicable to this Formal Solicitation.

H.National Forest Products Association (NFPA), as applicable to this Formal Solicitation.

I.City Procurement Ordinance City Code Section 18, Article III.

J.Conflict of Interest, City Code Section 2-611;61.

K.Cone of Silence, City Code Section 18-74.

L.The Florida Statutes Sections 218.73 and 218.74 on Prompt Payment.

M.City Financial Policies, City Code Chapter 18, Article IX.

N.City of Miami Charter Sections 3(f) (iii) and 29-B.

O. City of Miami Sale or Lease of Real Property, City Code Chapter 18, Article V.

P.City of Miami Living Wage Ordinance, Chapter 18, Article X, City Code.

Q.Alcoholic beverage, food and beverage laws, approvals and permits as required by state and local laws.

R.Miami -Dade County Shoreline Review Ordinance Chapter 33D, Article III, Miami-Dade County Code.

Lack of knowledge or notice by the Proposer will in no way be a cause for relief from responsibility. Non-compliance with all local, state, and federal directives, orders, regulations, and laws may be considered grounds for termination of contract(s).

Copies of the City Ordinances may be obtained from the City Clerk's Office.

1.20. CONE OF SILENCE - Pursuant to Section 18-74 of the City of Miami Code, a "Cone of Silence" is imposed upon each RFP, RFQ, or RFLI after advertisement and terminates at the time the City Manager issues a written recommendation to the Miami City Commission. The Cone of Silence shall be applicable only to Contracts for the

provision of goods and services and public works or improvements for amounts greater than $200,000. The Cone of Silence prohibits any communication regarding RFPs, RFQs, or RFLIs between, among others:

Potential vendors, service providers, Proposers, lobbyists or consultants and the City's professional staff including, but not limited to, the City Manager and the City Manager's staff; the Mayor, City Commissioners, or their respective staffs and any member of the respective selection/evaluation committee.

The provision does not apply to, among other communications:

Oral communications with the City's Procurement staff, provided the communication is limited strictly to matters of process or procedure already contained in the formal solicitation document; the provisions of the Cone of Silence do not apply to oral communications at duly noticed site visits/inspections, pre-proposal conferences, oral presentations before selection/evaluation committees, contract negotiations during any duly noticed public meeting, or public presentations made to the Miami City Commission during a duly noticed public meeting; or communications in writing or by email at any time with any City employee, official or member of the City Commission unless specifically prohibited by the applicable RFP, RFQ, or RFLI documents (See Section 2.2. of the Special Conditions); or communications in connection with the collection of industry comments or the performance of market research regarding a particular RFP, RFQ, or RFLI, by City Procurement staff.

Proposers must file a copy of any written communications with the Office of the City Clerk, which shall be made available to any person upon request. The City shall respond in writing and file a copy with the Office of the City Clerk (clerks@miamigov.com), which shall be made available to any person upon request. Written communications may be in the form of e-mail, with a copy to the Office of the City Clerk.

In addition to any other penalties provided by law, violation of the Cone of Silence by any Proposer shall render any award voidable. A violation by a particular Proposer, Offeror, Respondent, lobbyist or consultant shall subject same to potential penalties pursuant to the City Code. Any person having personal knowledge of a violation of these provisions shall report such violation to the State Attorney and/or may file a complaint with the Miami-Dade County Ethics Commission. Proposers should reference Section 18-74 of the City of Miami Code for further clarification.

This language is only a summary of the key provisions of the Cone of Silence. Please review City of Miami Code Section 18-74 for a complete and thorough description of the Cone of Silence. You may contact the City Clerk at 305-250-5360, to obtain a copy of same.

1.21. CONFIDENTIALITY - As a political subdivision and Florida municipality, the City of Miami is subject to the Florida Sunshine Act and Public Records Law. If this Contract/Agreement contains a confidentiality provision, it shall have no application when disclosure is required by Florida law or upon court order.

1.22. CONFLICT OF INTEREST - Proposers, by responding to this Formal Solicitation, certify that to the best of their knowledge or belief, no elected/appointed official or employee of the City of Miami is financially interested, directly or indirectly, in the purchase of goods/services specified in this Formal Solicitation. Any such interests on the part of the Proposer or its employees must be disclosed in writing to the City. Further, you must disclose the name of any City employee (or former employee of the City who left City service within the past two (2) years) who owns, directly or indirectly, an interest of five percent (5%) or more of the total assets of capital stock in the

Proposer's firm.

A. Proposer further agrees not to use or attempt to use any knowledge, property or resource which may be within their trust, or perform their duties, to secure a special privilege, benefit, or exemption for itself, or others. Proposer may not disclose or use information not available to members of the general public and gained by reason of their position, except for information relating exclusively to governmental practices, for their personal gain or benefit or for the personal gain or benefit of any other person or business entity.

B.Proposer who is a person (every officer, official and employee of the city, including every member of any board, commission or agency of the city) as defined in Section 2-611 of the City Code, hereby acknowledges that it has not contracted or transacted any business with the City or any person or agency acting for the City and has not appeared in representation of any third party before any board, commission or agency of the City within the past two years. Proposer further warrants that they are not related, specifically the spouse, son, daughter, parent, brother or sister, to: (i) any member of the commission; (ii) the mayor; (iii) any city employee; or (iv) any member of any board or agency of the City.

C.A violation of this section may subject the Proposer to immediate termination of any Professional Services Agreement with the City, imposition of the maximum fine and/or any penalties allowed by law.

Additionally, violations may be considered by and subject to action by the Miami-Dade County Commission on Ethics.

1.23.COPYRIGHT OR PATENT RIGHTS - Proposers warrant that there has been no violation of any intellectual property, copyright or patent rights in manufacturing, producing, or selling the goods or equipment shipped or ordered and/or services provided as a result of this formal solicitation, and Proposers agree to hold the City harmless from any and all liability, loss, or expense occasioned by any such violation.

1.24.COST INCURRED BY PROPOSER - All expenses involved with the preparation and submission of Responses to the City, or any work performed in connection therewith shall be borne by the Proposer(s).

1.25. DEBARMENT AND SUSPENSIONS (Sec 18-107)

(a)Authority and requirement to debar and suspend. After reasonable notice to an actual or prospective Contractual

Party, and after reasonable opportunity for such party to be heard, the City Manager, after consultation with the Chief Procurement Officer and the city attorney, shall have the authority to debar a Contractual Party, for the causes listed below, from consideration for award of city Contracts. The debarment shall be for a period of not fewer than

three years. The City Manager shall also have the authority to suspend a Contractual Party from consideration for award of city Contracts if there is probable cause for debarment, pending the debarment determination. The authority to debar and suspend contractors shall be exercised in accordance with regulations which shall be issued by the Chief Procurement Officer after approval by the City Manager, the city attorney, and the City Commission.

(b)Causes for debarment or suspension. Causes for debarment or suspension include the following:

(1)Conviction for commission of a criminal offense incident to obtaining or attempting to obtain a public or private Contract or subcontract, or incident to the performance of such Contract or subcontract.

(2)Conviction under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty.

(3)Conviction under state or federal antitrust statutes arising out of the submission of Bids or Proposals.

(4)Violation of Contract provisions, which is regarded by the Chief Procurement Officer to be indicative of non-responsibility. Such violation may include failure without good cause to perform in accordance with the terms and conditions of a Contract or to perform within the time limits provided in a Contract, provided that failure to perform caused by acts beyond the control of a party shall not be considered a basis for debarment or suspension.

(5)Debarment or suspension of the Contractual Party by any federal, state, local, or other governmental (public) agency or entity.

(6)False certification pursuant to paragraph (c) below.

(7)Found in violation of a zoning ordinance for which the violation remains noncompliant.

(8)Found in violation any city ordinance or regulation and for which a civil penalty or fine is due and owing to the city.

(9)Any other cause judged by the City Manager to be so serious and compelling as to affect the

responsibility of the Contractual Party performing city Contracts.

(c)Certification. All Contracts for goods and services, sales, and leases by the city shall contain a certification that neither the Contractual Party nor any of its principal owners or personnel have been convicted of any of the violations set forth above or debarred or suspended as set forth in paragraph (b)(5).

(d)Debarment and suspension decisions. Subject to the provisions of paragraph (a), the City Manager shall render a written decision stating the reasons for the debarment or suspension. A copy of the decision shall be provided promptly to the Contractual Party, along with a notice of said party's right to seek judicial relief.

1.26.DEBARRED/SUSPENDED VENDORS -An entity or affiliate who has been placed on the State of Florida debarred or suspended vendor list may not: 1) submit a response fora contract to provide goods or services to a public entity; 2) Submit a response on a contract with a public entity for the construction or repair of a public building or public work; 3) Submit response on leases of real property to a public entity; 4)award or perform work as a contractor, supplier, subcontractor, or consultant under contract with any public entity; and 5) transact business with any public entity.

1.27.DEFAULT/FAILURE TO PERFORM - The City shall be the sole judge of nonperformance, which shall include any failure on the part of the successful Proposer to accept the award, to furnish required documents, and/or to fulfill any portion of this contract within the time stipulated.

Upon default by the successful Proposer to meet any terms of this agreement, the City will notify the Proposer of the default and will provide the contractor three (3) days (weekends and holidays excluded) to remedy the default. Failure on the contractor's part to correct the default within the required three (3) days shall result in the Contract being terminated and upon the City notifying in writing the contractor of its intentions and the effective date of the termination. The following shall constitute default:

A.Failure to perform the work or deliver the goods/services required under the Contract and/or within the time required or failing to use the subcontractors, entities and personnel as identified and set forth, and to the degree specified in the Contract.

B.Failure to begin the work under this Contract within the time specified.

C.Failure to perform the work with sufficient workers and equipment or with sufficient materials to ensure timely completion.

D.Neglecting or refusing to remove materials or perform new work where prior work has been rejected as nonconforming with the terms of the Contract.

E.Becoming insolvent, being declared bankrupt, or committing any act of bankruptcy or insolvency, or making an assignment for the benefit of creditors, if the insolvency, bankruptcy, or assignment renders the successful Proposer incapable of performing the work in accordance with and as required by the Contract.

F. Failure to comply with any of the terms of the Contract in any material respect.

All costs and charges incurred by the City as a result of a default or a default incurred beyond the time limits stated, together with the cost of completing the work, shall be deducted from any monies due or which may become due on this Contract.

1.28. DETERMINATION OF RESPONSIVENESS AND RESPONSIBILITY - Each proposal will be reviewed to determine if it is responsive to the submission requirements outlined in the Formal Solicitation.

A. Responsive Proposal is one which follows the requirements of the Formal Solicitation, includes all

documentation, is submitted in the format outlined in the Formal Solicitation, is of timely submission, and has appropriate signatures as required on each document. Failure to comply with these requirements may deem a Proposal non-responsive.

B. Determination of Responsibility. A Responsible Proposer shall mean a Proposer who has submitted a proposal and who has the capability, as determined under Section 18-95 of the City Code, in all respects to fully perform the Contract requirements, and the integrity and reliability of which give reasonable assurance of good faith and performance.

1) Proposals will only be considered from any person or firm who are regularly engaged in the business of providing the good(s)/service(s) required by the Formal Solicitation. Proposer must be able to demonstrate a satisfactory record of performance and integrity, and have sufficient financial, material, equipment, facility, personnel resources, and expertise to meet all contractual requirements.

2) The City may consider any information available regarding the financial, technical, and other qualifications and abilities of a Proposer, including past performance (experience) with the City or any other governmental entity, in making the award.

3) The City may require the Proposer(s) to provide documentation that they have been designated as an authorized representative of a manufacturer or supplier which is the actual source of supply, if required by the Formal Solicitation.

1.29. DISCOUNTS OFFERED DURING TERM OF CONTRACT - Discount Prices offered in the response shall be fixed after the award by the Commission, unless otherwise specified in the Special Terms and Conditions. Price discounts off the original prices quoted in the response will be accepted from successful Proposer(s) during the term of the contract. Such discounts shall remain in effect for a minimum of 120 days from approval by the City Commission. Any discounts offered by a manufacturer to Proposer will be passed on to the City.

1.30. DISCREPANCIES, ERRORS, AND OMISSIONS - Any discrepancies, errors, or ambiguities in the Formal Solicitation or addenda (if any) should be reported in writing to the City's Purchasing Department. Should it be found necessary, a written addendum will be incorporated in the Formal Solicitation and will become part of the purchase agreement (contract documents). The City will not be responsible for any oral instructions, clarifications, or other communications.

A. Order of Precedence -Any inconsistency in this formal solicitation shall be resolved by giving precedence to the following documents, the first of such list being the governing documents.

1) PSA and/or Agreement and/or any Amendments to the PSA and/or Agreement

2)Specifications

3)Special Conditions

4)General Terms and Conditions

1.31.EMERGENCY / DISASTER PERFORMANCE - In the event of a hurricane or other emergency or disaster situation, the successful vendor shall provide the City with the commodities/services defined within the scope of this formal solicitation at the price contained within vendor's response. Further, successful vendor shall deliver/perform for the city on a priority basis during such times of emergency.

1.32.ENTIRE BID CONTRACT OR AGREEMENT - The Bid Contract or Agreement consists of this City of Miami Formal Solicitation and specifically this General Conditions Section, Contractor's Response and any written agreement entered into by the City of Miami and Contractor in cases involving RFPs, RFQs, and RFLIs, and represents the entire understanding and agreement between the parties with respect to the subject matter hereof and supersedes all other negotiations, understanding and representations, if any, made by and between the parties. To the extent that the agreement conflicts with, modifies, alters or changes any of the terms and conditions contained in the Formal Solicitation and/or Response, the Formal Solicitation and then the Response shall control. This Contract may be modified only by a written agreement signed by the City of Miami and Contractor.

1.33.ESTIMATED QUANTITIES - Estimated quantities or estimated dollars are provided for your guidance only. No guarantee is expressed or implied as to quantities that will be purchased during the contract period. The City is not obligated to place an order for any given amount subsequent to the award of this contract. Said estimates may be used by the City for purposes of determining the most advantageous Proposer meeting specifications. The City reserves the right to acquire additional quantities at the prices bid/proposed or at lower prices in this Formal Solicitation.

1.34. EVALUATION OF RESPONSES

A. Rejection of Responses

The City may reject a Response for any of the following reasons:

1)Proposer fails to acknowledge receipt of addenda;

2)Proposer misstates or conceals any material fact in the Response;

3)Response does not conform to the requirements of the Formal Solicitation;

4)Response requires a conditional award that conflicts with the method of award;

5)Response does not include required samples, certificates, licenses as required; and,

6)Response was not executed by the Proposer's authorized agent.

The foregoing is not an all-inclusive list of reasons for which a Response may be rejected. The City may reject and re-advertise for all or any part of the Formal Solicitation whenever it is deemed in the best interest of the City.

B. Elimination from Consideration

1)A contract shall not be awarded to any person or firm which is in arrears to the City upon any debt or contract, or which is in default on a bid, payment/ performance, bond they have submitted or as the surety bond or certificate furnished has not performed despite demand they do so or otherwise upon any obligation to the City.

2)A contract may not be awarded to any person or firm which has failed to perform under the terms and conditions of any previous contract with the City or deliver on time contracts of a similar nature.

3)A contract may not be awarded to any person or firm which has been debarred by the City in accordance with the City's Debarment and Suspension Ordinance.

C. Determination of Responsibility

1)Responses will only be considered from entities who are regularly engaged in the business of providing the goods/equipment/services required by the Formal Solicitation. Proposer must be able to demonstrate a satisfactory record of performance and integrity; and, have sufficient financial, material, equipment, facility, personnel resources, and expertise to meet all contractual requirements. The terms "equipment and organization" as used herein shall be construed to mean a fully equipped and well-established entity in line with the best industry practices in the industry as determined by the City.

2)The City may consider any evidence available regarding the financial, technical and other qualifications and abilities of a Proposer, including past performance (experience) with the City or any other governmental entity in making the award.

3)The City may require the Proposer(s) to show proof that they have been designated as an authorized representative of a manufacturer or supplier which is the actual source of supply, if required by the Formal Solicitation.

1.35. EXCEPTIONS TO GENERAL AND/OR SPECIAL CONDITIONS OR SPECIFICATIONS - Exceptions to the specifications shall be listed on the Response and shall reference the section. Any exceptions to the General or Special Conditions shall be cause for the bid (IFB) to be considered non-responsive. It also may be cause for a RFP, RFQ, or RFLI to be considered non-responsive; and, if exceptions are taken to the terms and conditions of the resulting agreement it may lead to terminating negotiations.

1.36. F.O.B. DESTINATION - Unless otherwise specified in the Formal Solicitation, all prices quoted/proposed by the Proposer must be F.O.B. DESTINATION, inside delivery, with all delivery costs and charges included in the bid/proposal price, unless otherwise specified in this Formal Solicitation. Failure to do so may be cause for rejection of bid/proposal.

1.37. FIRM PRICES - The Proposer warrants that prices, terms, and conditions quoted in its response will be firm throughout the duration of the contract unless otherwise specified in the Formal Solicitation. Such prices will remain firm for the period of performance or resulting purchase orders or contracts, which are to be performed or supplied over a period of time.

1.38. FLORIDA MINIMUM WAGE AND CITY OF MIAMI LIVING WAGE ORDINANCE -

A. Florida Minimum Wage. In accordance with the Constitution of the State of Florida, Article X, Section 24, employers shall pay employee wages no less than the minimum wage for all hours worked in Florida. Accordingly, it is the Successful Proposer's/Contractor's and their subcontractor's responsibility to understand and comply with this Florida minimum wage requirement and pay its employees the current established hourly minimum wage rate. This minimum wage rate is subject to change or adjusted by the rate of inflation using the consumer price index ("CPI") for urban wage earners and clerical workers, CPI-W, or a successor index as calculated by the United States Department of Labor. Each adjusted minimum wage rate calculated, shall be determined and published by the Agency Workforce Innovation on September 30th of each year and take effect on the following January 1st.

It is the Proposer's and their subcontractor's (if applicable), full responsibility to determine whether any of their employees may be impacted by this Florida Minimum Wage Law, at any given point in time during the term of the Bid Contract. If impacted, Proposer must provide, with its bid, employee name(s), job title(s), job description(s), and current pay rate(s). Failure to submit this information at the time of bid submittal constitute Successful Proposer's/Contractor's acknowledgement and understanding that the Florida Minimum Wage Law will not impact its prices throughout the term of the Bid Contract, and a waiver of any contractual price increase request(s). The City reserves the right to request and the Successful Proposer/Contractor must provide for any, and all information to make a wage and contractual price increase(s) determination.

B. City of Miami Living Wage Ordinance. The City of Miami adopted a Living Wage Ordinance for City Service Contracts with a total contract value exceeding $100,000 annually, and that have been competitively solicited and awarded on, or after January 1, 2017 by the City.

"Service Contract" means a contract to provide services to the City, excluding, however, professional services as defined by the "Consultants Competitive Negotiation Act" set forth in F.S. § 287.055, and Section 18-87 of the City Code, and/or the other exclusions provided by Section 18-557 of the City Code. Section 18-557 is attached as Attachment A. Please see provisions in Attachment A.

If a solicitation requires services, effective on January 1, 2017, Contractors must pay to all its employees, who provide services, a living wage of no less than $15.00 per hour without health benefits; or a wage of no less than $13.19 an hour, with health benefits.

This language is only a summary of the key provisions of the City of Miami Living Wage Ordinance. Please review Attachment A, attached hereto, for a complete and thorough description of the City of Miami Living Wage Ordinance.

1.39. GOVERNING LAW AND VENUE - The validity and effect of this Contract shall be governed by the laws of the State of Florida. The parties agree that any action, mediation or arbitration arising out of this Contract shall take place in Miami-Dade County, Florida. In any action or proceeding each party shall bear their own respective attorney's fees.

1.40. HEADINGS AND TERMS - The headings to the various paragraphs of this Contract have been inserted for convenient reference only and shall not in any manner be construed as modifying, amending or affecting in any way the expressed terms and provisions hereof.

1.41. HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPPA) - Any person or entity that performs or assists the City of Miami with a function or activity involving the use or disclosure of "individually identifiable health information (IIHI) and/or Protected Health Information (PHI) shall comply with the Health Insurance Portability and Accountability Act (HIPAA) of 1996 and the City of Miami Privacy Standards. HIPAA mandates for privacy, security and electronic transfer standards, which include but are not limited to:

A.Use of information only for performing services required by the contract or as required by law;

B.Use of appropriate safeguards to prevent non-permitted disclosures;

C.Reporting to the City of Miami of any non-permitted use or disclosure;

D.Assurances that any agents and subcontractors agree to the same restrictions and conditions that apply to the Proposer and reasonable assurances that IIHI/PHI will be held confidential;

E.Making Protected Health Information (PHI) available to the customer;

F.Making PHI available to the customer for review and amendment; and incorporating any amendments requested by the customer;

G.Making PHI available to the City of Miami for an accounting of disclosures; and

H.Making internal practices, books and records related to PHI available to the City of Miami for compliance audits.

PHI shall maintain its protected status regardless of the form and method of transmission (paper records, and/or electronic transfer of data). The Proposer must give its customers written notice of its privacy information practices including specifically, a description of the types of uses and disclosures that would be made with protected health information.

1.42 INDEMNIFICATION - Contractor shall indemnify, hold/save harmless and defend at its own costs and expense the City, its officials, officers, agents, directors, and employees, from liabilities, damages, losses, and costs, including, but not limited to reasonable attorney's fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of Contractor and persons employed or utilized by Contractor in the performance of this Contract and will indemnify, hold harmless and defend the City, its officials, officers, agents, directors and employees against, any civil actions, statutory or similar claims, injuries or damages arising or resulting from the permitted work, even if it is alleged that the City, its officials and/or employees were negligent. These indemnifications shall survive the term of this Contract. In the event that any action or proceeding is brought against City by reason of any such claim or demand, Contractor shall, upon written notice from City, resist and defend such action or proceeding by counsel satisfactory to City. The Contractor expressly understands and agrees that any insurance protection required by this Contract or otherwise provided by Contractor shall in no way limit the responsibility to indemnify, keep and save harmless and defend the City or its officers, employees, agents and instrumentalities as herein provided.

The indemnification provided above shall obligate Contractor to defend at its own expense to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at City's option, any and all claims of liability and all suits and actions of every name and description which may be brought against City whether performed by Contractor, or persons employed or utilized by Contractor.

This indemnity will survive the cancellation or expiration of the Contract. This indemnity will be interpreted under the laws of the State of Florida, including without limitation and which conforms to the limitations of §725.06 and/or §725.08, Fla. Statues, as amended from time to time as applicable.

Contractor shall require all Sub-Contractor agreements to include a provision that they will indemnify the City.

The Contractor agrees and recognizes that the City shall not be held liable or responsible for any claims which may result from any actions or omissions of the Contractor in which the City participated either through review or concurrence of the Contractor's actions. In reviewing, approving or rejecting any submissions by the Contractor or other acts of the Contractor, the City in no way assumes or shares any responsibility or liability of the Contractor or Sub-Contractor, under this Agreement.

1.43. FORMATION AND DESCRIPTIVE LITERATURE - Proposer must furnish all information requested in the spaces provided in the Formal Solicitation. Further, as may be specified elsewhere, each Proposer must submit for evaluation, cuts, sketches, descriptive literature, technical specifications, and Material Safety Data Sheets (MSDS)as required, covering the products offered. Reference to literature submitted with a previous response or on file with the Buyer will not satisfy this provision.

1.44. INSPECTIONS - The City may, at reasonable times during the term hereof, inspect Contractor's facilities and perform such tests, as the City deems reasonably necessary, to determine whether the goods and/or services required to be provided by the Contractor under this Contract conform to the terms and conditions of the Formal Solicitation. Contractor shall make available to the City all reasonable facilities and assistance to facilitate the performance of tests or inspections by City representatives. All tests and inspections shall be subject to, and made in accordance with, the provisions of the City of Miami Ordinance No. 12271 (Section 18-79), as same may be amended or supplemented from time to time.

1.45. INSPECTION OF RESPONSE - Responses received by the City pursuant to a Formal Solicitation will not be made available until such time as the City provides notice of a decision or intended decision or within 30 days after bid closing, whichever is earlier. Bid/Proposal results will be tabulated and may be furnished upon request via fax or e-mail to the Sr. Procurement Specialist issuing the Solicitation. Tabulations also are available on the City's Web Site following recommendation for award.

1.46. INSURANCE - Within ten (10) days after receipt of Notice of Award, the successful Contractor, shall furnish Evidence of Insurance to the Purchasing Department, if applicable. Submitted evidence of coverage shall demonstrate strict compliance to all requirements listed on the Special Conditions entitled "Insurance Requirements". The City shall be listed as an "Additional Insured."

Issuance of a Purchase Order is contingent upon the receipt of proper insurance documents. If the insurance certificate is received within the specified time frame but not in the manner prescribed in this Solicitation the Contractor shall be verbally notified of such deficiency and shall have an additional five (5) calendar days to submit a corrected certificate to the City. If the Contractor fails to submit the required insurance documents in the manner prescribed in this Solicitation within fifteen (15) calendar days after receipt Notice of Award, the contractor shall be in default of the contractual terms and conditions and shall not be awarded the contract. Under such circumstances, the Proposer may be prohibited from submitting future responses to the City. Information regarding any insurance requirements shall be directed to the Risk Administrator, Department of Risk Management, at 444 SW 2nd Avenue, 9th Floor, Miami, Florida 33130, 305-416-1604.

The Proposer shall be responsible for assuring that the insurance certificates required in conjunction with this Section remain in effect for the duration of the contractual period; including any and all option terms that may be granted to the Proposer.

1.47. INVOICES - Invoices shall contain purchase order number and details of goods and/or services delivered (i.e. quantity, unit price, extended price, etc.); and in compliance with Chapter 218 of the Florida Statutes (Prompt Payment Act).

1.48. LOCAL PREFERENCE

A.City Code Section 18-85, states, "when a responsive, responsible non-local bidder submits the lowest bid price, and the bid submitted by one or more responsive, responsible local bidders who maintain a local office, as defined in Section 18-73, is within fifteen percent (15%) of the price submitted by the non-local bidder, then that non-local bidder and each of the aforementioned responsive, responsible local bidders shall have the opportunity to submit a best and final bid equal to or lower than the amount of the low bid previously submitted by the non-local bidder. Contract award shall be made to the lowest responsive, responsible bidder submitting the lowest best and final bid. In the case of a tie in the best and final bid between a local bidder and a non-local bidder, contract award shall be made to the local bidder."

B.City Code Section 18-86, states, "the RFP, RFLI or RFQ, as applicable, may, in the exercise of the reasonable professional discretion of the City Manager, director of the using agency, and the Chief Procurement Officer, include a five (5%) percent evaluation criterion in favor of proposers who maintain a local office, as defined in Section 18-73. In such cases, this five (5%) percent evaluation criterion in favor of proposers who maintain a local office will be specifically defined in the RFP, RFLI or RFQ, as applicable; otherwise, it will not apply.

1.49. MANUFACTURER'S CERTIFICATION - The City reserves the right to request from Proposers a separate Manufacturer's Certification of all statements made in the bid/proposal. Failure to provide such certification may result in the rejection of bid/proposal or termination of contract/agreement, for which the Proposer must bear full liability.

1.50. MODIFICATIONS OR CHANGES IN PURCHASE ORDERS AND CONTRACTS - No contract or understanding to modify this Formal Solicitation and resultant purchase orders or contracts, if applicable, shall be binding upon the City unless made in writing by the Director of Procurement of the City of Miami, Florida through the issuance of a change order, addendum, amendment, or supplement to the contract, purchase order or award sheet as appropriate.

1.51. MOST FAVORED NATIONS - Successful Proposer shall not treat the City of Miami ("City") worse than any other similarly-situated local government and, in this regard, grants the City a "most favored nations clause" meaning the City will be entitled to receive and be governed by the most favorable terms and conditions that Successful Bidder/Proposer grants now or in the future to a similarly situated local government.

1.52. NO PARTNERSHIP OR JOINT VENTURE - Nothing contained in this Contract will be deemed or construed to create a partnership or joint venture between the City of Miami and Contractor, or to create any other similar relationship between the parties.

1.53. NONCONFORMANCE TO CONTRACT CONDITIONS - Items may be tested for compliance with specifications under the direction of the Florida Department of Agriculture and Consumer Services or by other

appropriate testing Laboratories as determined by the City. The data derived from any test for compliance with specifications is public record and open to examination thereto in accordance with Chapter 119, Florida Statutes.

Items delivered not conforming to specifications may be rejected and returned at Proposer's expense. These non-conforming items not delivered as per delivery date in the response and/or Purchase Order may result in Proposer being found in default in which event any and all re-procurement costs may be charged against the defaulted contractor. Any violation of these stipulations may also result in the supplier's name being removed from the City of Miami's Supplier's list.

1.54. NONDISCRIMINATION -Proposer agrees that it shall not discriminate as to race, sex, color, age, religion, national origin, marital status, or disability in connection with its performance under this formal solicitation. Furthermore, Proposer agrees that no otherwise qualified individual shall solely by reason of his/her race, sex, color, age, religion, national origin, marital status or disability be excluded from the participation in, be denied benefits of, or be subjected to, discrimination under any program or activity.

In connection with the conduct of its business, including performance of services and employment of personnel, Proposer shall not discriminate against any person on the basis of race, color, religion, disability, age, sex, marital status or national origin. All persons having appropriate qualifications shall be afforded equal opportunity for employment.

1.55. NON-EXCLUSIVE CONTRACT/ PIGGYBACK PROVISION - At such times as may serve its best interest, the City of Miami reserves the right to advertise for, receive, and award additional contracts for these herein goods and/or services, and to make use of other competitively bid (governmental) contracts, agreements, or other similar sources for the purchase of these goods and/or services as may be available.

It is hereby agreed and understood that this formal solicitation does not constitute the exclusive rights of the successful Proposer(s) to receive all orders that may be generated by the City in conjunction with this Formal Solicitation.

In addition, any and all commodities, equipment, and services required by the City in conjunction with construction projects are solicited under a distinctly different solicitation process and shall not be purchased under the terms, conditions and awards rendered under this solicitation, unless such purchases are determined to be in the best interest of the City.

1.56. NOTICE REGARDING "CURES" - Proposals submitted with irregularities, deficiencies, and/or technicalities that deviate from the minimum qualifications and submission requirements of Request for Qualifications (RFQ), Request for Proposals (RFP), invitation to bid (ITB), invitation for bids (IFB), invitation to quote (ITQ), Requests for Letters of Interest (RFLI) and Request for Sponsorships (RFS) shall result in a non-responsive determination. any solicitation issued after May 6, 2019, shall comply with APM 2-19. APM 2-19 is attached hereto. only minor irregularities, deficiencies, and technicalities may be allowed to be timely cured by the proposer at the sole discretion of the city. material irregularities, deficiencies, and technicalities cannot be cured by

the proposer, and are not waivable by the city.

PROPOSALS SUBMITTED WITH IRREGULARITIES, DEFICIENCIES, AND/OR TECHNICALITIES THAT DEVIATE FROM THE MINIMUM QUALIFICATIONS AND SUBMISSION REQUIREMENTS OF THIS RFP/Q SHALL RESULT IN A NON-RESPONSIVE DETERMINATION. The City will not give consideration to the curing of any Proposals that fail to meet the minimum qualifications and submission requirements of this RFP/Q. Proposer understands that non-responsive Proposals will not be evaluated and, therefore, will be eliminated from the Evaluation/Selection Process

1.57. OCCUPATIONAL LICENSE - Any person, firm, corporation or joint venture, with a business location in the City of Miami and is submitting a Response under this Formal Solicitation shall meet the City's Occupational License Tax requirements in accordance with Chapter 31.1, Article I of the City of Miami Charter. Others with a location outside the City of Miami shall meet their local Occupational License Tax requirements. A copy of the license must be submitted with the response; however, the City may at its sole option and in its best interest allow the Proposer to supply the license to the City during the evaluation period, but prior to award.

1.58. ONE PROPOSAL - Only one (1) Response from an individual, firm, partnership, corporation or joint venture will be considered in response to this Formal Solicitation.

1.59. OWNERSHIP OF DOCUMENTS - It is understood by and between the parties that any documents, records, files, or any other matter whatsoever which is given by the City to the successful Proposer pursuant to this formal solicitation shall at all times remain the property of the City and shall not be used by the Proposer for any other purposes whatsoever without the written consent of the City.

1.60. PARTIAL INVALIDITY - If any provision of this Contract or the application thereof to any person or circumstance shall to any extent be held invalid, then the remainder of this Contract or the application of such provision to persons or circumstances other than those as to which it is held invalid shall not be affected thereby, and each provision of this Contract shall be valid and enforced to the fullest extent permitted by law.

1.61. PERFORMANCE/PAYMENT BOND- A Contractor may be required to furnish a Performance/Payment Bond as part of the requirements of this Contract, in an amount equal to one hundred percent (100%) of the contract price.

1.62. PREPARATION OF RESPONSES (HARDCOPY FORMAT) - Proposers are expected to examine the specifications, required delivery, drawings, and all special and general conditions. All bid/proposed amounts, if required, shall be either typewritten or entered into the space provided with ink. Failure to do so will be at the Proposer's risk.

A.Each Proposer shall furnish the information required in the Formal Solicitation. The Proposer shall sign the Response and print in ink or type the name of the Proposer, address, and telephone number on the face page and on each continuation sheet thereof on which he/she makes an entry, where required.

B.If so required, the unit price for each unit offered shall be shown, and such price shall include packaging, handling and shipping, and F.O.B. Miami delivery inside City premises unless otherwise specified. Proposer shall include in the response all taxes, insurance, social security, workmen's compensation, and any other benefits normally paid by the Proposer to its employees. If applicable, a unit price shall be entered in the "Unit Price" column for each item. Based upon estimated quantity, an extended price shall be entered in the "Extended Price" column for each item offered. In case of a discrepancy between the unit price and extended price, the unit price will be presumed correct.

C.The Proposer must state a definite time, if required, in calendar days for delivery of goods and/or services.

D.The Proposer should retain a copy of all response documents for future reference.

E.All responses, as described, must be fully completed and typed or printed in ink and must be signed in ink with the firm's name and by an officer or employee having authority to bind the company or firm by his/her signature. Bids/Proposals having any erasures or corrections must be initialed in ink by person signing the response or the response may be rejected.

F.Responses are to remain valid for at least 180 days. Upon award of a contract, the content of the Successful Proposer's response may be included as part of the contract, at the City's discretion.

G.The City of Miami's Response Forms shall be used at all times. Use of any other forms will result in the rejection of the response. **RESPONSES WILL BE SUBMITTED AS FOLLOWS: ONEORIGINAL HARDCOPY AND SEVEN (7) COPIES INELECTRONIC FORMAT (FLASH DRIVE). NO ON-LINE SUBMITTALS WILL BE ACCEPTED. ANY REQUIRED ATTACHMENTS PROVIDED BY THE CITY MUST BE RETURNED TO THE CITY OR YOUR RESPONSE SHALL BE DEEMED NON-RESPONSIVE.**

1.63.PRICE ADJUSTMENTS - Any price decrease effectuated during the contract period either by reason of market change or on the part of the contractor to other customers shall be passed on to the City of Miami.

1.64. PRODUCT SUBSTITUTES - In the event a particular good (that has been awarded and approved) becomes unavailable during the term of the Contract, the Contractor awarded that item may arrange with the City's authorized representative(s) to supply a substitute product at the awarded price or lower, provided that a sample is approved in advance of delivery and that the new product meets or exceeds all quality requirements.

1.65. CONFLICT OF INTEREST, AND UNETHICAL BUSINESS PRACTICE PROHIBITIONS - Contractor represents and warrants to the City that it has not employed or retained any person or company employed by the City to solicit or secure this Contract and that it has not offered to pay, paid, or agreed to pay any person any fee, commission, percentage, brokerage fee, or gift of any kind contingent upon or in connection with, the award of this Contract.

1.66. PROMPT PAYMENT -Proposers may offer a cash discount for prompt payment; however, discounts shall not be considered in determining the lowest net cost for response evaluation purposes.

Proposers are required to provide their prompt payment terms in the space provided on the Formal Solicitation. If no prompt payment discount is being offered, the Proposer must enter zero (0) for the percentage discount to indicate no discount. If the Proposer fails to enter a percentage, it is understood and agreed that the terms shall be 2% 20 days, effective after receipt of invoice or final acceptance by the City, whichever is later.

When the City is entitled to a cash discount, the period of computation will commence on the date of delivery, or receipt of a correctly completed invoice, whichever is later. If an adjustment in payment is necessary due to damage, the cash discount period shall commence on the date final approval for payment is authorized. If a discount is part of the contract, but the invoice does not reflect the existence of a cash discount, the City is entitled to a cash discount with the period commencing on the date it is determined by the City that a cash discount applies.

Price discounts off the original prices quoted on the Price Sheet will be accepted from successful Proposers during the term of the contract.

1.67. PROPERTY - Property owned by the City of Miami is the responsibility of the City of Miami. Such property furnished to a Contractor for repair, modification, study, etc., shall remain the property of the City of Miami. Damages to such property occurring while in the possession of the Contractor shall be the responsibility of the

Contractor. Damages occurring to such property while in route to the City of Miami shall be the responsibility of the Contractor. In the event that such property is destroyed or declared a total loss, the Contractor shall be responsible for replacement value of the property at the current market value, less depreciation of the property, if any.

1.68. PROVISIONS BINDING - Except as otherwise expressly provided in the resulting Contract, all covenants, conditions and provisions of the resulting Contract shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and assigns.

1.69. PUBLIC ENTITY CRIMES - A person or affiliate who has been placed on the convicted vendor list, following a conviction for a public entity crime may not:

A. Submit a Bid to provide any goods or services to a public entity.

B. Submit a Bid on a contract with a public entity for the construction or repair of a public building or public work.

C. Submit responses on leases of real property to a public entity.

D. Be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity.

E. Transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

1.70. PUBLIC RECORDS - Proposer understands that the public shall have access, at all reasonable times, to all documents and information pertaining to City contracts, subject to the provisions of Chapter 119, Florida Statutes, and City Code, Section 18, Article III, and agrees to allow access by the City and the public, to all documents subject to disclosure under applicable law. Successful Proposer shall additionally comply with the provisions of Section 119.0701, Florida Statutes, titled "Contracts; public records".

Proposer shall additionally comply with Section 119.0701, Florida Statutes, including without limitation:

A. Keep and maintain public records that ordinarily and necessarily would be required by the City to perform this service.

B. Provide the public with access to public records on the same terms and conditions as the City would at the cost provided by Chapter 119, Florida Statutes, or as otherwise provided by law.

C. Ensure that public records that are exempt or confidential and exempt from disclosure are not disclosed except as authorized by law.

D. Meet all requirements for retaining public records and transfer, at no cost, to the City all public records in its possession upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt from disclosure requirements.

E. All electronically stored public records must be provided to the City in a format compatible with the City's information technology systems. **IF THE CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONSULTANT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE DIVISION OF PUBLIC RECORDS AT (305) 416-1800, VIA EMAIL AT PUBLICRECORDS@MIAMIGOV.COM, OR REGULAR MAIL AT CITY OF MIAMI OFFICE OF THE CITY ATTORNEY, 444 SW 2ND AVENUE, 9TH FL, MIAMI, FL 33130. THE CONSULTANT MAY ALSO CONTACT THE RECORDS CUSTODIAN AT THE CITY OF MIAMI DEPARTMENT WHO IS ADMINISTERING THIS CONTRACT.**

1.71. QUALITY OF GOODS, MATERIALS, SUPPLIES, PRODUCTS, AND EQUIPMENT - All materials used in the manufacturing or construction of supplies, materials, or equipment covered by this solicitation shall be new. The items bid/proposed must be of the latest make or model, of the best quality, and of the highest grade of workmanship, unless as otherwise specified in this Solicitation.

1.72. QUALITY OF WORK/SERVICES - The work/services performed must be of the highest quality and workmanship. Materials furnished to complete the service shall be new and of the highest quality except as otherwise specified in this Solicitation.

1.73. REMEDIES PRIOR TO AWARD (Sec. 18-106) - If prior to Contract award it is determined that a formal solicitation or proposed award is in violation of law, then the solicitation or proposed award shall be cancelled by the City Commission, the City Manager or the Chief Procurement Officer, as may be applicable, or revised to comply with the law.

1.74. RESOLUTION OF CONTRACT DISPUTES (Sec. 18-105)

A. Authority to resolve Contract disputes. The City Manager, after obtaining the approval of the City Attorney, shall have the authority to resolve disputes between the Proposer and the City which arise under, or by virtue of, a Contract between them; provided that, in cases involving an amount greater than $25,000, the City Commission must approve the City Manager's decision. Such authority extends, without limitation, to disputes based upon breach of Contract, mistake, misrepresentation, or lack of complete performance, and shall be invoked by a Contractual Party by submission of a protest to the City Manager.

B. Contract dispute decisions. If a dispute is not resolved by mutual consent, the City Manager shall promptly render a written report stating the reasons for the action taken by the City Commission, or the City Manager, which shall be final and conclusive. A copy of the decision shall be immediately provided to the protesting party, along with a notice of such party's right to seek judicial relief, provided that the protesting party shall not be entitled to such judicial relief without first having followed the procedure set forth in this Section.

1.75. RESOLUTION OF PROTESTED SOLICITATIONS AND AWARDS (SECTION 18-104):

Right to protest.

The following procedures shall be used for resolution of protested solicitations and awards except for purchases of goods, supplies, equipment, and services, the estimated cost of which does not exceed $25,000.00. Protests thereon shall be governed by the administrative policies and procedures of purchasing.

(1) Protest of solicitation.

a. Any prospective proposer who perceives itself aggrieved in connection with the solicitation of a contract may protest to the chief procurement officer. A written notice of intent to file a protest shall be filed with the chief procurement officer within three days after the request for proposals, request for qualifications or request for letters of interest is published in a newspaper of general circulation. A notice of intent to file a protest is considered filed when received by the chief procurement officer; or

b. Any prospective bidder who intends to contest bid specifications or a bid solicitation may protest to the chief procurement officer. A written notice of intent to file a protest shall be filed with the chief procurement officer within three days after the bid solicitation is published in a newspaper of general circulation. A notice of intent to file a protest is considered filed when received by the chief procurement officer.

(2) Protest of award.

a. Any actual proposer who perceives itself aggrieved in connection with the recommended award of contract may protest to the chief procurement officer. A written notice of intent to file a protest shall be filed with the chief procurement officer within two days after receipt by the proposer of the notice of the city manager's recommendation for award of contract. The receipt by proposer of such notice shall be confirmed by the city by

facsimile or electronic mail or U.S. mail, return receipt requested. A notice of intent to file a protest is considered filed when received by the chief procurement officer; or

b. Any actual responsive and responsible bidder whose bid is lower than that of the recommended bidder may protest to the chief procurement officer. A written notice of intent to file a protest shall be filed with the chief procurement officer within two days after receipt by the bidder of the notice of the city's determination of non-responsiveness or non-responsibility. The receipt by bidder of such notice shall be confirmed by the city by facsimile or electronic mail or U.S. mail, return receipt requested. A notice of intent to file a protest is considered filed when received by the chief procurement officer.

c. A written protest based on any of the foregoing must be submitted to the chief procurement officer within five days after the date the notice of protest was filed. A written protest is considered filed when received by the chief procurement officer.

The written protest may not challenge the relative weight of the evaluation criteria or the formula for assigning points in making an award determination.

The written protest shall state with particularity the specific facts and law upon which the protest of the solicitation or the award is based and shall include all pertinent documents and evidence and shall be accompanied by the required filing fee as provided in subsection (f). This shall form the basis for review of the written protest and no facts, grounds, documentation or evidence not contained in the protester's submission to the chief procurement officer at the time of filing the protest shall be permitted in the consideration of the written protest.

No time will be added to the above limits for service by mail. In computing any period of time prescribed or allowed by this section, the day of the act, event or default from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, Sunday or legal holiday in which event the period shall run until the end of the next day which is neither a Saturday, Sunday or legal holiday. Intermediate Saturdays, Sundays and legal holidays shall be excluded in the computation of the time for filing.

Authority to resolve protests; hearing officer(s).

Hearing officers appointed by the city shall have authority to resolve protests filed under this chapter of the City Code. The city manager shall appoint a hearing officer, from a separate list of potential hearing officers pre-approved by the city commission, to resolve protests filed in accordance with this section, no later than five working days following the filing of a bid protest. The hearing officer shall have the authority to settle and resolve any written protest. The hearing officer shall submit said decision to the protesting party and to the other persons specified within ten days after he/she holds a hearing under the protest.

(1) Hearing officer. The hearing officer may be a special master as defined in chapter 2, article X, section 2-811 of the City Code, or a lawyer in good standing with the Florida Bar for a minimum of ten years with a preference given to a lawyer who has served as an appellate or trial court judge. The hearing officer may be appointed from alternative sources (e.g. expert consulting agreements, piggyback contracts, etc.) where the city commission adopts a recommendation of the city attorney that such action is necessary to achieve fairness in the proceedings. The engagement of hearing officers is excluded from the procurement ordinance as legal services. The hearing officers appointed in the pre-qualified group should be scheduled to hear protests on a rotational basis.

(2) Right of protest. Any actual bidder or proposer who has standing under Florida law dissatisfied and aggrieved with the decision of the city regarding the protest of a solicitation or the protest of an award as set forth above in this section may request a protest hearing. Such a written request for a protest hearing must be initiated with a notice of intent to protest followed by an actual protest as provided in subsection 18-104(a). The notice of intent to protest and the actual protest must each be timely received by the chief procurement officer and must comply with all requirements set forth in subsection 18-104(a). Failure to submit the required notice of intent to protest and the actual protest within the specified timeframes will result in an administrative dismissal of the protest.

(3) Hearing date. Within 30 days of receipt of the notice of protest, the chief procurement officer shall schedule a hearing before a hearing officer, at which time the person protesting shall be given the opportunity to demonstrate why the decision of the city relative to the solicitation or the award, which may include a recommendation for award by the city manager to the city commission, as applicable, should be overturned. The party recommended for award, if it is a protest of award, shall have a right to intervene and be heard.

(4) Hearing procedure. The procedure for any such hearing conducted under this article shall be as follows:

a. The city shall cause to be served by certified mail a notice of hearing stating the time, date, and place of the hearing. The notice of hearing shall be sent by certified mail, return receipt requested, to the mailing address of the protester.

b. The party, any intervenor, and the city shall each have the right to be represented by counsel, to call and examine witnesses, to introduce evidence, to examine opposing or rebuttal witnesses on any relevant matter related to the protest even though the matter was not covered in the direct examination, and to impeach any witness regardless of which party first called him/her to testify. The hearing officer may extend the deadline for completion of the protest hearing for good cause shown, but such an extension shall not exceed an additional five business days. The hearing officer shall consider the written protest and supporting documents and evidence appended thereto, supporting documents or evidence from any intervenor, and the decision or recommendation as to the solicitation or award being protested, as applicable. The protesting party, and any intervenor, must file all pertinent documents supporting his/her protest or motion to intervene at least five business days before the hearing, as applicable. The hearing officer shall allow a maximum of two hours for the protest presentation and a maximum of two hours for the city response. When there is an intervenor, a maximum of two hours will be added for the intervenor. In the event of

multiple protests for the same project, the hearing officer shall allocate time as necessary to ensure that the hearing shall not exceed a total of one day.

c. The hearing officer shall consider the evidence presented at the hearing. In any hearing before the hearing officer, irrelevant, immaterial, repetitious, scandalous, or frivolous evidence shall be excluded. All other evidence of a type commonly relied upon by reasonably prudent persons in the conduct of their affairs shall be admissible whether or not such evidence would be admissible in trial in the courts of Florida. The hearing officer may also require written summaries, proffers, affidavits, and other documents the hearing officer determines to be necessary to conclude the hearing and issue a final order within the time limits set forth by this section.

d. The hearing officer shall determine whether procedural due process has been afforded, whether the essential requirements of law have been observed, and whether the decision was arbitrary, capricious, an abuse of discretion, or unsupported by substantial evidence as a whole. Substantial evidence means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.

e. Within ten days from the date of the hearing, the hearing officer shall complete and submit to the City Manager, the City Attorney, any intervenor, the Chief Procurement Officer, and the person requesting said hearing a final order consisting of his/her findings of fact and conclusions of law as to the denial or granting of the protest, as applicable.

f. The decisions of the hearing officer are final in terms of city decisions relative to the protest.

Any appeal from the decision of the hearing officer shall be in accordance with the Florida Rules of Appellate Procedure.

Compliance with filing requirements.

Failure of a party to timely file either the notice of intent to file a protest or the written protest, together with the required filing fee as provided in subsection (f), with the chief procurement officer within the time provided in subsection (a), above, shall constitute a forfeiture of such party's right to file a protest pursuant to this section. The protesting party shall not be entitled to seek judicial relief without first having followed the procedure set forth in this section.

Stay of procurements during protests.

Upon receipt of a written protest filed pursuant to the requirements of this section, the city shall not proceed further with the solicitation or with the award of the contract until the protest is resolved by the chief procurement officer or the city commission as provided in subsection (b) above, unless the city manager makes a written determination that the solicitation process or the contract award must be continued without delay in order to avoid an immediate and serious danger to the public health, safety or welfare.

Costs.

All costs accruing from a protest shall be assumed by the protestor.

Filing fee.

The written protest must be accompanied by a filing fee in the form of a money order or cashier's check payable to the city in an amount equal to one percent of the amount of the bid or proposed contract, or $5,000.00, whichever is less, which filing fee shall guarantee the payment of all costs which may be adjudged against the protestor in any administrative or court proceeding. If a protest is upheld by the chief procurement officer and/or the city commission, as applicable, the filing fee shall be refunded to the protestor less any costs assessed under subsection (e) above. If the protest is denied, the filing fee shall be forfeited to the city in lieu of payment of costs for the administrative proceedings as prescribed by subsection (e) above. (Ord. No. 12271, § 2, 8-22-02; Ord. No. 13629, § 2, 9-8-16).

1.76. SAMPLES - Samples of items, when required, must be submitted within the time specified at no expense to the City. If not destroyed by testing, Proposer(s) will be notified to remove samples, at their expense, within 30 days after notification. Failure to remove the samples will result in the samples becoming the property of the City.

1.77. SELLING, TRANSFERRING OR ASSIGNING RESPONSIBILITIES - Proposer shall not sell, assign, transfer or subcontract at any time during the term of the Contract, or any part of its operations, or assign any portion of the performance required by this contract, except under and by virtue of written permission granted by the City through the proper officials, which may be withheld or conditioned, in the City's sole discretion.

1.78. SERVICE AND WARRANTY - When specified, the Proposer shall define all warranty, service and replacements that will be provided. Proposer must explain on the Response to what extent warranty and service facilities are available. A copy of the manufacturer's warranty, if applicable, should be submitted with your response.

1.79. SILENCE OF SPECIFICATIONS - The apparent silence of these specifications and any supplemental specification as to any detail or the omission from it of detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship and services are to be first quality. All interpretations of these specifications shall be made upon the basis of this statement.

If your firm has a current contract with the State of Florida, Department of General Services, to supply the items on this solicitation, the Proposer shall quote not more than the contract price; failure to comply with this request will result in disqualification of proposal.

1.80. SUBMISSION AND RECEIPT OF RESPONSES - Responses shall be submitted in hardcopy format to the City Clerk, City Hall, 3500 Pan American Drive, Miami, Florida 33133-5504, at or before, the specified closing date and time as designated in the RFP, RFQ, or RFLI. **NO EXCEPTIONS.** Proposers are welcome to attend the solicitation closing; however, no award will be made at that time.

A.Hardcopy responses shall be enclosed in a sealed envelope, box package. The face of the envelope, box or package must show the hour and date specified for receipt of responses, the solicitation number and title, and the name and return address of the Proposer. Hardcopy responses not submitted on the requisite Response Forms may be rejected. Hardcopy responses received at any other location than the specified shall be deemed non-responsive.

Directions to City Hall:

FROM THE NORTH: I-95 SOUTH UNTIL IT TURNS INTO US1. US1 SOUTH TO 27TH AVE., TURN LEFT, PROCEED SOUTH TO SO. BAYSHORE DR. (3RD TRAFFIC LIGHT), TURN LEFT, 1 BLOCK TURN RIGHT ON PAN AMERICAN DR. CITY HALL IS AT THE END OF PAN AMERICAN DR. PARKING IS ON RIGHT.

FROM THE SOUTH: US1 NORTH TO 27TH AVENUE, TURN RIGHT, PROCEED SOUTH TO SO.

BAYSHORE DR. (3RD TRAFFIC LIGHT), TURN LEFT, 1 BLOCK TURN RIGHT ON PAN AMERICAN DR. CITY HALL IS AT THE END OF PAN AMERICAN DR. PARKING IS ON RIGHT.

B.Facsimile responses will not be considered.

C.Failure to follow these procedures is cause for rejection of proposal.

D.The responsibility for obtaining and submitting a response on or before the close date is solely and strictly the responsibility of Proposer. The City of Miami is not responsible for delays caused by the United States mail delivery or caused by any other occurrence. Responses received after the solicitation closing date and time will be returned unopened and will not be considered for award.

E. Late responses will be rejected.

F.All responses are subject to the conditions specified herein. Those which do not comply with these conditions are subject to rejection.

G.Modification of responses already submitted will be considered only if received at the City before the time and date set for closing of solicitation responses. All modifications must be submitted via the Oracle System or in writing. Once a solicitation closes (closed date and/or time expires), the City will not consider any subsequent submission which alters the responses.

H.If hardcopy responses are submitted at the same time for different solicitations, each response must be placed in a separate envelope, box, or package and each envelope, box or package must contain the information previously stated in 1.82.A.

1.81. TAXES - The City of Miami is exempt from any taxes imposed by the State and/or Federal Government. Exemption certificates will be provided upon request. Notwithstanding, Proposers should be aware of the fact that all materials and supplies which are purchased by the Proposer for the completion of the contract is subject to the Florida State Sales Tax in accordance with Section 212.08, Florida Statutes, as amended and all amendments thereto and shall be paid solely by the Proposer.

1.82. TERMINATION -The City Manager on behalf of the City of Miami reserves the right to terminate this contract by written notice to the contractor effective the date specified in the notice should any of the following apply:

A.The contractor is determined by the City to be in breach of any of the terms and conditions of the contract.

B.The City has determined that such termination will be in the best interest of the City to terminate the contract for its own convenience;

C.Funds are not available to cover the cost of the goods and/or services. The City's obligation is contingent upon the availability of appropriate funds.

1.83. TERMS OF PAYMENT - Payment will be made by the City after the goods and/or services awarded to a Proposer have been received, inspected, and found to comply with award specifications, free of damage or defect, and properly invoiced. No advance payments of any kind will be made by the City of Miami.

Payment shall be made after delivery, within 45 days of receipt of an invoice and authorized inspection and acceptance of the goods/services and pursuant to Section 218.74, Florida Statutes and other applicable law.

1.84. TIMELY DELIVERY - Time will be of the essence for any orders placed as a result of this solicitation. The City reserves the right to cancel such orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on their Response. Deliveries are to be made during regular City business hours unless otherwise specified in the Special Conditions.

1.85. TITLE - Title to the goods or equipment shall not pass to the City until after the City has accepted the goods/equipment or used the goods, whichever comes first.

1.86. TRADE SECRETS EXECUTION TO PUBLIC RECORDS DISCLOSURE- All Responses submitted to

the City are subject to public disclosure pursuant to Chapter 119, Florida Statutes. An exception may be made for "trade secrets."

If the Response contains information that constitutes a "trade secret", all material that qualifies for exemption from Chapter 119 must be submitted in a separate envelope, clearly identified as "TRADE SECRETS EXCEPTION," with your firm's name and the Solicitation number and title marked on the outside.

Please be aware that the designation of an item as a trade secret by you may be challenged in court by any person.

By your designation of material in your Response as a "trade secret" you agree to indemnify and hold harmless the City for any award to a plaintiff for damages, costs or attorney's fees and for costs and attorney's fees incurred by the City by reason of any legal action challenging your claim.

1.87. UNAUTHORIZED WORK OR DELIVERY OF GOODS- Neither the qualified Proposer(s) nor any of his/her employees shall perform any work or deliver any goods unless a change order or purchase order is issued and received by the Contractor. The qualified Proposer(s) shall not be paid for any work performed or goods delivered outside the scope of the contract or any work performed by an employee not otherwise previously authorized.

1.88. USE OF NAME - The City is not engaged in research for advertising, sales promotion, or other publicity purposes. No advertising, sales promotion or other publicity materials containing information obtained from this Solicitation are to be mentioned, or imply the name of the City, without prior express written permission of the City Manager or the City Commission.

1.89. VARIATIONS OF SPECIFICATIONS - For purposes of solicitation evaluation, Proposers must indicate any variances from the solicitation specifications and/or conditions, no matter how slight. If variations are not stated on their Response, it will be assumed that the product fully complies with the City's specifications.

2. Special Conditions

2.1. PURPOSE

The purpose of this Solicitation is to establish a contract, for pavement resurfacing and roadway repair services, as specified herein, from a source(s), fully compliant with the terms, conditions and stipulations of the Solicitation

2.2. DEADLINE FOR RECEIPT OF REQUEST FOR ADDITIONAL INFORMATION/CLARIFICATION

Any questions or clarifications concerning this solicitation shall be submitted via the BidSync Electronic Bidding System (BidSync), with a copy filed with the Office of the City Clerk via email at Clerks@miamigov.com, pursuant to Section 1.20. Cone of Silence. The solicitation title and number shall be referenced on all correspondence. All questions must be received no later than September 24, 2020 at 2:00 PM. All responses to questions will be sent to all prospective bidders in the form of an addendum. NO QUESTIONS WILL BE RECEIVED VERBALLY OR AFTER SAID DEADLINE.

2.3. SUBMISSION AND RECEIPT OF RESPONSE

Electronic Bid submittals to this IFB shall be submitted through the BidSync Electronic Bidding System ("BidSync") until the date and time as indicated in the Solicitation. The responsibility for submitting a Bid on/or before the stated closing time and date is solely and strictly the responsibility of the Bidder. The City will in no way be responsible for delays caused by technical difficulties or caused by any other occurrence. Electronic Bid submissions may require the uploading of electronic attachments. The submission of attachments containing embedded documents or proprietary file extensions is prohibited. All documents should be attached as individual files and labeled. Any Bids received and time stamped through BidSync, prior to the Bid submittal deadline, shall be accepted as a timely submittal and anything thereafter will be rejected. Additionally, BidSync will not allow for the electronic Bid submittal after the closing date and time has lapsed. Bids will be opened promptly at the time and date specified.

All expenses involved with the preparation and submission of Bids to the City, or any work performed in connection therewith, shall be borne by the Bidder(s). Accordingly, Bidder(s):

1. Must register, free of charge, with BidSync Electronic Bidding System ("BidSync") to establish an account in order to have access to view and/or respond to any solicitations issued by the City of Miami's Procurement Department ("City").
2. Shall submit all Bids electronically. Hard copy Bid submittals will not be accepted. **NO EXCEPTIONS.**
3. Must submit the Certification Statement and associated solicitation documents which define requirements of items and/or services to be purchased and must be completed and submitted as outlined within the solicitation via BidSync. The use of any other forms and/or the modification of City forms will result in the rejection of the Bidder's Bid submittal.
4. Shall ensure that the Certification Statement is fully completed and provided with your Bid. Failure to comply with these requirements may cause the Bid to be rejected.
5. Must ensure that an n authorized agent of the Bidder's firm signs the Certification Statement and submits it electronically. **FAILURE TO SIGN THE CERTIFICATION STATEMENT SHALL DEEM THE BID NON-RESPONSIVE.**

6. May be considered non-responsive if Bids do not conform to the terms and conditions of this solicitation.

This clause supersedes General Terms and Conditions Section 1.62, Preparation of Bids (Hardcopy) and 1.80, Submission and Receipt of Bids, in their entirety.

2.4. PRE-BID CONFERENCE

A Virtual Voluntary pre-bid conference will be held on September 18, 2020 at 10:00 AM, via **this link or via phone (786) 530-7005; Conference ID: 685822220#**. A discussion of the requirements of the Solicitation will occur at that time.

All questions and answers affecting the scope of work/specifications of the IFB will be included in an addendum, that will be distributed through BidSync, following the Pre-Bid Conference to all the attendees. Because the City considers the Pre-Bid Conference to be critical to understanding the Solicitation requirements, attendance is highly recommended.

It is the Bidder's responsibility, prior to submitting a bid, to acquaint himself/herself thoroughly, regarding any and all conditions and/or requirements that may in any manner affect the work to be performed. No allowances will be made because of lack of knowledge of these conditions.

2.5. BIDDERS MINIMUM REQUIREMENTS

Bids will be considered only from firms that are regularly engaged in the business of providing the services as described in this bid; and that have adequate financial support, equipment and personnel to ensure that they can satisfactorily provide the goods and/or services if awarded a contract under the terms and conditions herein stated. The minimum qualifications for this bid are that the Successful Bidder shall, as of Bid Due Date:

1. Not have any member, officer, or stockholder that is in arrears or is in default of any debt or contract involving the City, is a defaulter surety otherwise, upon any obligation to the City, and/or has failed to perform faithfully on any previous contract with the City.

2. Have no record of pending lawsuit or criminal activities, and have never been declared bankrupt within the last three (3) years.

3. Have adequate financial support, equipment, and organization to ensure that they can satisfactorily provide the goods and/or services if awarded a Contract under the terms and conditions herein stated.

4. Have a current certified license as a General Contractor from the State of Florida Construction Industry License Board for the class of work to be performed, **OR** the appropriate Certificate of Competency or the State Contractor's

Certificate of Registration as issued by Broward or Miami-Dade County Code, which authorizes the Successful Bidder to perform the proposed work. License/Certifications shall be provided with the bid response.

5. Have a satisfactory record of performance for at least three (3) years.

6. Be registered as an entity with the Florida State Department, Division of Corporations, for a minimum of the last three (3) consecutive years, authorizing said entity to do business within the State of Florida.

***NOTE: Holder of all licenses must be an employee of the Successful Bidder. Licenses and certifications shall be provided in the bid response.**

If any or all work required in conjunction with this bid is performed by a subcontractor(s), an applicable Certificate of Competency issued to the subcontractor(s) shall be submitted with the Bidder's proposal.

2.6. METHOD OF AWARD

This Solicitation is divided into two (2) Groups: Group 1 - Federally Funded Projects; and Group 2 - Non-Federally Funded Projects. Bidders can bid on one Group or both Groups, using the applicable Bid Price Sheet(s).

Award of this contract will be made to the lowest responsible and responsive bidder(s), who bid on all items in the aggregate, meeting Specifications. The City shall select up to three (3) vendor(s), with the lowest deemed the "primary vendor" and the next lowest the "secondary vendor", and so on, in the order of lowest prices provided to the City. Should the "primary vendor" not be able to provide the item at the time needed, the City has the option to select the next lowest "secondary vendor" to fulfill the order and so forth.

2.7. TERM OF CONTRACT

The Contract shall commence upon the date of notice of award and shall be effective for three (3) years with the option to renew for two (2) additional two (2) year periods, subject to the availability of funds for succeeding fiscal years.

Continuation of the contract beyond the initial period is a City prerogative; not a right of the Bidder. This prerogative will be exercised only when such continuation is clearly in the best interest of the City.

2.8. CONDITIONS FOR RENEWAL

Each renewal of this contract is subject to the following:

(1) Continued satisfactory performance compliance with the specifications, terms and conditions established herein.

(2) Availability of funds.

2.9. ESCALATION CLAUSE

The City acknowledges the fluctuating nature of prices for items specified. Accordingly an escalator/de-escalator clause will be accepted only under the following condition.

The Successful Bidder(s) will be allowed to increase/decrease their contractual prices annually to cover future drastic fuel price changes. The market changes will be determined utilizing the Consumer Price Index for All Urban Consumers (CPI-U), U.S. City Average, Miami-Ft. Lauderdale, FL., Gasoline (Unleaded Regular), and Index Base Period between 2017 through 2020. The escalation using the CPI will be determined by the percent change in the level of the CPI between the reference period and a subsequent time period. This will be calculated by first determining the index point change between the two periods and then the percent change. The following example illustrates the computation of percent change:

CPI for current period (2018)	**136.0**
Less CPI for previous period (2017)	**129.9**
Equals index point change	**6.1**
Divided by previous period CPI	**129.9**
Equals	**0.047**
Result multiplied by 100	**0.047 x 100**
Equals percent change	**4.7**

The Procurement Department may, in its sole discretion, make an equitable adjustment in the contract terms and/or pricing if pricing or availability of supply is affected by extreme or unforeseen volatility in the marketplace, that is, by circumstances that satisfy all the following criteria: (1) the volatility is due to circumstances beyond the Successful Bidder(s) control, (2) the volatility affects the marketplace or industry, not just the particular contract source of supply, (3) the effect on pricing or availability of supply is substantial, and (4) the volatility so affects the Successful Bidder(s) that continued performance of the contract would result in a substantial loss. Successful Bidder(s) might have to supply documentation to justify any requested percentage increase in cost to the City of Miami.

2.10. SPECIFICATION EXCEPTION

Specifications are based on the most current information available. Bidder shall notify the City of Miami Procurement Department, in writing, no less than ten (10) days prior to solicitation closing date of any change in the manufacturers' specifications which conflict with the specifications. For hard copy bid submittals, bidders must explain any deviation from the specifications in writing as a footnote on the applicable specification page and enclose a copy of the manufacturer's specifications data detailing the changed item(s) with their submission. For electronic bid submittals, bidders must explain in the Header Section or by an Attachment and, if applicable, enclose a scanned copy of the manufacturer's specifications data detailing the changed item(s) with their submission. Additionally, bidders must indicate any options requiring the addition of other options, as well as those which are included as a part of another option. Failure of bidders to comply with these provisions will result in bidders being held responsible for all costs required to bring the item(s) in compliance with contract specifications.

2.11. NON-APPROPRIATION OF FUNDS

In the event no funds or insufficient funds are appropriated and budgeted or are otherwise unavailable in any fiscal period for payments due under this contract, then the City, upon written notice to the Successful Bidder(s)/Proposer(s) of such occurrence, shall have the unqualified right to terminate the contract without any penalty or expense to the City. No guarantee, warranty or representation is made that any project(s) will be awarded to any firm(s).

2.12. INSURANCE REQUIREMENTS

The Successful Bidder(s) shall furnish to City of Miami, c/o Procurement Department, 444 SW 2nd Avenue, 6th Floor, Miami, Florida 33130, Certificate(s) of Insurance which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

I. Commercial General Liability

A. Limits of Liability

Bodily Injury and Property Damage Liability

Each Occurrence	$1,000,000
General Aggregate Limit	$ 2,000,000
Products/Completed Operations	$ 1,000,000
Personal and Advertising Injury	$1,000,000

B. Endorsements Required

City of Miami listed as an additional insured

Contingent and Contractual Liability

Premises and Operations Liability

Explosion, Collapse and Underground Hazard

Primary Insurance Clause Endorsement

II. Business Automobile Liability

A. Limits of Liability

Bodily Injury and Property Damage Liability

Combined Single Limit

Any Auto

Including Hired, Borrowed or Non-Owned Autos

Any One Accident $ 1,000,000

B. Endorsements Required

City of Miami listed as an additional insured

III. Worker's Compensation

Limits of Liability
Statutory-State of Florida
Waiver of subrogation

A. Employer's Liability
Limits of Liability
$1,000,000 for bodily injury caused by an accident, each accident.
$1,000,000 for bodily injury caused by disease, each employee
$1,000,000 for bodily injury caused by disease, policy limit

IV. Umbrella Liability

A. Limits of Liability
Bodily Injury and Property Damage Liability

Each Occurrence	$ 2,000,000
Aggregate	$ 2,000,000

City of Miami listed as an additional insured. Coverage is excess follow form over the general liability and auto policies.

V. Owners and Contractors Protective Liability

Each Occurrence	$1,000,000
Policy Aggregate	$1,000,000

City of Miami listed as the named insured

The above policies shall provide the City of Miami with written notice of cancellation or material change from the insurer not less than (30) days prior to any such cancellation or material change, or in accordance to policy provisions.

BINDERS ARE UNACCEPTABLE.

The insurance coverage required shall include those classifications, as listed in standard liability insurance manuals, which most nearly reflect the operations of the bidder.

All insurance policies required above shall be issued by companies authorized to do business under the laws of the

State of Florida, with the following qualifications:

The Company must be rated no less than "A" as to management, and no less than "Class V" as to financial strength, by the latest edition of Best's Insurance Guide, published by A.M. Best Company, Oldwick, New Jersey, or its equivalent. All policies and/or certificates of insurance are subject to review and verification by Risk Management prior to insurance approval.

Certificates will indicate no modification or change in insurance shall be made without thirty (30) days written advance notice to the certificate holder.

NOTE: CITY BID NUMBER AND/OR TITLE OF BID MUST APPEAR ON EACH CERTIFICATE.

Compliance with the foregoing requirements shall not relieve the bidder of their liability and obligation under this section or under any other section of this Agreement.

If insurance certificates are scheduled to expire during the contractual period, the Bidder shall be responsible for submitting new or renewed insurance certificates to the City at a minimum of ten (10) calendar days in advance of such expiration.

In the event that expired certificates are not replaced with new or renewed certificates which cover the contractual period, the City shall:

- Suspend the contract until such time as the new or renewed certificates are received by the City in the manner prescribed in the Invitation For Bid.
- The City may, at its sole discretion, terminate this contract for cause and seek re-procurement damages from the Successful Bidder in conjunction with the General and Special Terms and Conditions of the Solicitation.

The Successful Bidder shall be responsible for assuring that the insurance certificates required in conjunction with this Section remain in force for the duration of the contractual period; including any and all option terms that may be granted to the Successful Bidder. **See Attachment A - Insurance Addendum.**

2.13. BID BOND

All bids must be accompanied by a Bid Bond in the amount of 5% of the total bid submitted, to be in the form of a Cashier's Check or Money Order made payable to the City of Miami; a bond written by a surety company authorized to do business in the State of Florida and shall comply with State Statute 287.0935. The bond, from all unsuccessful bidders, if in the form of a Cashier's Check, will be returned after bid award. Prospective Bidders may either (1) utilize the BidSnyc "Surety 2000" platform to submit bid bonds or (2) mail in their original bid bond to the City. If option #2 is utilized, Bidder shall submit a copy of the bid bond with their electronic bid submission.

2.14. REFERENCES

Each bid must be accompanied by a list of three (3) references, by completing Attachment B - Reference Submittal Form. NO BID WILL BE CONSIDERED WITHOUT THIS LIST. These references must be from contracts within

the last three (3) years and for services as described in this solicitation.

2.15. CURES

Please refer to Attachment C - APM Regarding Cures and **Section 1.56, Notice Regarding "Cures"** of the General Terms and Conditions of this Solicitation.

2.16. TIE BIDS

Whenever two or more Bids which are equal with respect to price, quality and service are received by the City for the procurement of commodities or contractual services, a Bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie Bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

(1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the action that will be taken against employees for violations of such prohibition.

(2) Inform employees about the dangers of drug abuse in the workplace, the business' policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

(3) Give each employee engaged in providing the commodities or contractual services that are under Bid a copy of the statement specified in subsection (1).

(4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under Bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

(5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program, if such is available in the employee's community, by any employee who is so convicted.

(6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

2.17. PROJECT MANAGER

Upon award, Successful Bidder shall report and work directly with the City Engineer assigned, or designee, who shall be designated as the Project Manager(s) for the City.

2.18. SUBCONTRACTOR(S)

Bidder must list any or all subcontractor(s) that may be utilized to assist in the performance of the work specified herein on Attachment D - Subcontractors, if applicable. Any subcontractor(s) listed must meet the same requirements and submit the same information listed under the Bidder's Minimum Qualifications section. All information required shall be included in the solicitation response. If Bidder does not include any subcontractor(s) as part of its bid submittal, it will be construed that bidder will be able to handle the entire workload by itself and will not be allowed to subcontract any of the work unless it request in writing the hiring of subcontractor(s) with the

aforementioned requirements attached to its request within seventy two (72) hours of considering hiring subcontractor(s). The City will grant or deny such request in writing within forty-eight (48) hours of receiving said request.

2.19. CONTINGENCY

Items so entitled on the Bid document shall be the cash allowance sum per contract year, and in the amount indicated. These shall be included in the Bid to provide funds for payment for items of work not foreseen at the time of bidding. Payment from these Bid Items will be made only as directed by the Project Manager, or designee. The Successful Bidder is not obligated to contingency funds and should not expect to receive them unless used for work not foreseen at the time of bidding.

2.20. RESPONSE TIME

A twenty-four (24) hour response time is required. Failure to respond to any assigned project within the specified time will result in the successful vendor paying any and all costs associated with the repairs performed by a secondary vendor.

2.21. COMPLETED WORK

The City shall be notified by the Successful Bidder upon completion of work. The City shall inspect and approve completed work before authorizing payment. Work not satisfactorily completed shall be redone by the Successful Bidder at no additional charge to the City.

2.22. EMERGENCY/DISASTER PERFORMANCE

In the event of a hurricane or other emergency or disaster situation, the Successful Bidder(s) shall provide the City with services defined within the scope of work of this solicitation at the price contained within the Successful Bidder(s)' bid response. Further, the Successful Bidder(s) shall perform for the City on a priority basis during such times of emergency.

2.23. METHOD OF PAYMENT

Payment will be made within forty-five (45) calendar days, in accordance with Florida Statutes Sections 218.73 and 218.74 of the Prompt Payment Act for services rendered the previous month, upon submission of properly certified/approved invoices. All such information shall be provided to the City Project Manager, or designee.

The City will pay the contract price minus any liquidated damages and/or other damages to the Successful Bidder upon completion and acceptance. Damages caused by the Successful Bidder's employees shall be estimated by the City Project Manager, or designee and computed actual costs and repairs shall be deducted from the Successful Bidders total monthly billing.

Each invoice shall include total cost as well as, proof of payment to subcontractors and suppliers with corresponding release of liens forms and affidavits.

2.24. LIQUIDATED DAMAGES

Failure to complete the project in accordance with the specifications and to the satisfaction of the City within the time stated, shall result in liquidated damages being assessed. The Successful Bidder shall be subject to an assessment of liquidated damages in the amount of $100.00 for each and every calendar day the work remains incomplete (not to exceed the total amount of the contract), as compensation due to the City for loss of use and for additional costs incurred by the City due to such incompletion of the work. The City shall have the right to deduct said liquidated damages from any amount due or that may become due to the Successful Bidder under this agreement or to invoice the Successful Bidder for such damages if the costs incurred exceed the amount due to the Successful Bidder.

2.25. CONTRACTOR TO BE REPRESENTED

The Successful Bidder, at all times, must either be personally present at the worksite or be represented at the worksite by a responsible agent or agents designated by the Successful Bidder in written notice to the City prior to the beginning of work. Such notification shall include pertinent data such as addresses, phone numbers, etc., where said agent or agents may be contacted at any time of the day or night. The agent or agents shall be clothed with full authority to act for the Successful Bidder in all cases, and to carry out any instructions relative to the work may be given by the City.

2.26. USE OF PREMISES

The Successful Bidder shall confine their equipment, apparatus, the storage of materials, and the operation of their workmen to the limits indicated by law, ordinances, permits, or direction of the Project Manager, or designee, and shall not unreasonably encumber the premises with his/her materials. The Successful Bidder shall take all measures necessary to protect their own materials.

2.27. DAMAGES TO PUBLIC/PRIVATE PROPERTY

The Successful Bidder shall carry out the work with such care and methods as not to result in damage to public or private property adjacent to the work. Should any public or private property be damaged or destroyed, the Successful Bidder, at their expense, shall repair or make restoration as is practical and acceptable to the City and/or owners of destroyed or damaged property promptly within a reasonable length of time. (Not to exceed one month from date damage was done.)

2.28. PUBLIC CONVENIENCE AND SAFETY

The Successful Bidder shall conduct their work so as to interfere as little as possible with private business or public travel. The Successful Bidder shall, at their own expense, whenever necessary or required, maintain barricades, maintain lights, and take such other precautions as may be necessary to protect life and property, and the Successful Bidder shall be liable for all damages occasioned in any way by their actions or neglect or that of their agents or employees.

The Successful Bidder shall meet the following noise abatement performance standards for all construction equipment. The operation or permitting the operation of any tool or equipment is prohibited:

1. Between the hours of 6:00 PM and 8:00 AM the following day on weekdays, or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across and at a residential district boundary or within a noise sensitive zone, except for emergency work of public service utilities or by special permission issued pursuant to subsection (c) of City of Miami Ordinance Section 36-6, Construction Equipment.
2. At any other time, such that the sound level at or across a real property boundary exceeds a reading of 0.79 weighted average dBA for the daily period of operation. Such sound levels shall be measured with a sound level meter manufactured according to standards prescribed by the American National Standards Institute.

2.29. SAFETY MEASURES

Successful Bidder shall take all necessary precautions for the safety of employees, and shall erect and properly maintain at all times all necessary safeguards for the protection of the employees and the public. Danger signs warning against hazards created by their operation and work in progress must be posted.

All employees of Successful Bidder shall be expected to wear safety eyewear, appropriate clothing, and hearing protection when and wherever applicable. The Successful Bidder shall use only equipment that is fully operational and in safe operating order. Successful Bidder shall be especially careful when servicing property when pedestrians and/or vehicles are in close proximity - work shall cease until it is safe to proceed.

2.30. ENVIRONMENTAL REGULATIONS

The City reserves the right to consider a Bidder's history of citations and/or violations of environmental regulations in investigating a Bidder's responsibility, and further reserves the right to declare a Bidder non-responsible if the history of violations warrant such determination in the opinion of the City.

2.31. ADDITIONS/DELETIONS OF SERVICES/ITEMS/SUPPLIERS

Although this Solicitation identifies specific services/items to be serviced, it is hereby agreed and understood that any service/item/supplier may be added/deleted to/from this contract at the option of the City. When an addition to the contract is required, the Successful Bidder(s) under this contract shall be invited to submit price quotes for these new services/items. If these quotes are comparable with market prices offered for similar services/items, they shall be added to the contract whichever is in the best interest of the City and an amendment and a separate purchase order shall be issued by the City. If these quotes are not comparable with market prices offered, they shall be quoted by additional suppliers and an amendment and separate purchase order shall be issued by the City.

2.32. ADDITIONAL CONTRACTOR(S) OR SUBCONTRACTOR(S)

There are no implied or express guarantee that all Successful Bidders under this contract will receive work assignments during any given catastrophic events such as tornadoes, hurricanes, severe storms or any other public emergency. However, the City reserves the right to assign work to multiple Successful Bidders at any given point in time, add Contractor(s) who were not part of the initial award to the contract or direct Successful Bidder(s) to hire Subcontractor(s), which may or may not be part of this bid contract, to expedite the clean-up efforts of debris to restore normalcy and order to the lives of City residents, businesses, and general public in an expeditious manner.

2.33. FAILURE TO PERFORM

Should it not be possible to reach the Successful Bidder or supervisor and/or should remedial action not be taken within forty-eight (48) hours of any failure to perform according to specifications, the City reserves the right to declare the Successful Bidder in default of the contract or make appropriate reductions in the contract payment.

2.34. TERMINATION

A. FOR DEFAULT

If Successful Bidder defaults in its performance under this Contract and does not cure the default within 30 days after written notice of default, the City Manager may terminate this Contract, in whole or in part, upon written notice without penalty to the City of Miami. In such event the Successful Bidder shall be liable for damages including the excess cost of procuring similar supplies or services: provided that if, (1) it is determined for any reason that the Successful Bidder was not in default or (2) the Successful Bidder's failure to perform is without their or their Subcontractor's control, fault or negligence, the termination will be deemed to be a termination for the convenience of the City of Miami.

B. FOR CONVENIENCE

The City Manager may terminate this Contract, in whole or in part, upon 30 days prior written notice when it is in the best interest of the City of Miami. If this Contract is for supplies, products, equipment, or software, and so terminated for the convenience by the City of Miami the Successful Bidder will be compensated in accordance with an agreed upon adjustment of cost. To the extent that this Contract is for services and so terminated, the City of Miami shall be liable only for payment in accordance with the payment provisions of the Contract for those services rendered prior to termination.

2.35. ADDITIONAL TERMS AND CONDITIONS

No additional terms and conditions included as part of your solicitation response shall be evaluated or considered, and any and all such additional terms and conditions shall have no force or effect and are inapplicable to this solicitation. If submitted either purposely, through intent or design, or inadvertently, appearing separately in transmittal letters, specifications, literature, price lists or warranties, it is understood and agreed that the General Conditions and Special Conditions in this solicitation are the only conditions applicable to this solicitation and that the Bidder's authorized signature affixed to the Bidder's/Proposer's acknowledgment form attests to this.

2.36. FEDERALLY FUNDED PROJECTS

2.36.a) INTRODUCTION

This section applies to all projects funded with federal dollars. Section 2.1 also applies to this Group. Bidders must use the applicable Federal Funded Bid Price Sheet (Attachment H) for this bid when pricing for Group 1.

2.36.b) LOCAL PREFERENCE

Local Preference does not apply to responses on the Federally Funded Bid Price Sheet for this IFB.

2.36.c) DAVIS-BACON ACT

Federally assisted construction contracts must adhere to Davis-Bacon Act wages and benefits rate schedules. Each Bidder shall use the Federal Wages reflected in Wage General Decision Number - FL20200178, in developing its bid for this project. The selected bidder/contractor shall be required to provide certified payroll records documenting the work performed on this project. **See Attachment E - Davis Bacon - General Decision Number for Wage Rates.**

Wage General Decision Number- FL20200178 can be found in the Attachment Section under Attachment E.

2.36.d) COMPLIANCE WITH COPELAND "ANTI-KICKBACK" ACT

1. The Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

2. The Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

3. A breach of the contract clauses above may be grounds for termination of the contact, and for debarment as a Contractor and subcontractor as provided in 29 C.F.R. § 5.12.

2.36.e) COMPLIANCE WITH THE CONTRACT WORK HOURS & SAFETY STANDARDS ACT

1. Overtime Requirements: No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty (40) hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one half time the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages: In the event of any violation of the clause set forth in paragraph (1) of this section, the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in case of the work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty (40) hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

3. Withholding for unpaid wages and liquidated damages: The City of Miami shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as

provided in the clause set forth in paragraph (2) of this section.

4. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontract. The Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraph (1) through (4) of this section.

2.36.f) PARTS AT PASS-THROUGH COST (FOR REPAIRS OUTSIDE THE SCOPE OF WORK)

All cost for parts required for repair jobs and not otherwise included in the scope of work shall be billed at the Contractor's actual cost, and will be passed on to the City without markup or any additional fees. The Contractor shall submit purchase receipt of parts along with the labor invoice for payment.

The Contractor shall be responsible for sourcing all parts necessary to complete the work requirements of each job specification. Replacement parts furnished must be of the same manufacturer or an equal product. All equipment and materials shall be commercial quality and grade, and be from a regular product line. Prototype, obsolete, and residential quality/grade equipment/materials shall not be specified or installed in the facilities.

2.36.g) EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and the employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

7. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or order of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

2.36.h) CLEAN AIR ACT

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

2. The Contractor agrees to report each violation to the City of Miami and understands and agrees that the City of Miami will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

2.36.i) FEDERAL WATER POLLUTION CONTROL ACT

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C.1251 et seq.

2. The Contractor agrees to report each violation to the City of Miami and understands and agrees that the City of Miami will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

2.36.j) NO OBLIGATION BY FEDERAL GOVERNMENT

The Federal Government is not a party to this contract and is not subject to any obligation or liabilities to the non-Federal entity, Contractor, or any other party pertaining to any matter resulting from the contract.

2.36.k) PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

2.36.l) BYRD ANTI-LOBBYING AMENDMENT, 31.U.S.C. § 1352 (AS AMENDED)

Bidders who bid for an award of $100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer, or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that take place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

Please refer to Attachment F - Certification Regarding Lobbying. **It is MANDATORY for the Bidder to return this form signed along with their bid reponse.**

2.36.m) PROCUREMENT OF RECOVERED MATERIALS

1. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired;

a. Competitively within a timeframe providing for compliance with the contract performance schedule;
b. Meeting contract performance requirements; or
c. At a reasonable price.

2. Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

2.36.n) DHS SEAL, LOGO, AND FLAGS

The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

2.36.o) COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS

This is an acknowledgement that FEMA financial assistance will be used to fund this contract only. The Contractor will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

2.36.p) ACCESS TO RECORDS

1. The Contractor agrees to provide the City of Miami, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

2. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

3. The Contractor agrees to provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the contract.

2.36.q) SUSPENSION AND DEBARMENT (IN ADDITION TO GENERAL TERM AND CONDITIONS, SECTION 1.25)

(1) This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the Contractor is required to verify that none of the Contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined in 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters too.

(3) This certification is a material representation of fact relied upon by the City of Miami. If it is later determined that the Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State of Florida, and the City of Miami, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The Contractor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any Contract that may arise from this offer. The Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

2.37. NON-FEDERALLY FUNDED PROJECTS

2.37.a) INTRODUCTION

This section applies to all projects that are non-federally funded. Section 2.1 also applies to this Group. Bidders must use the applicable Bid Price Sheet (Attachment H) for this bid when pricing for Group 2.

2.37.b) LIVING WAGE ORDINANCE

The City of Miami Living Wage Ordinance is applicable to this service contract. Please refer to Section 1.38 of the General Terms and Conditions for further information and guidance on how to comply with this ordinance.

2.37.c) PERFORMANCE BOND

Within ten (10) working days following notice of award by the City, the Successful Bidder shall furnish to the City of Miami, a Performance Bond in the total amount of the Cost to the City for the period of the contract (to be determined at the time of award). The Performance Bond can be in the form of a Cashier's Check, made payable to the City of Miami; a bond written by a surety company authorized to do business in the State of Florida and shall comply with State Statute 287.0935; or an Irrevocable Letter of Credit. If the latter is chosen, it must be written on a bank located in Miami-Dade County, be in the amount of the contract and should clearly and expressly state that it cannot be revoked until express written approval has been given by the City of Miami. The City, to draw on same, would merely have to give written notice to the bank with a copy to the successful contractor.

2.37.d) LOCAL PREFERENCE

Attachment G - Local Office Preference applies to Group 2, Non-Federally Funded Projects.

3. Specifications

3.1. SPECIFICATIONS/SCOPE OF WORK

BIDDERS ARE NOT REQUIRED TO ENTER A UNIT PRICE IN THE LINE ITEM LISTED IN THE ACTUAL IFB WHEN SUBMITTING VIA HARDCOPY RESPONSE. BIDDERS SHALL SUBMIT THEIR BID PRICES UTILIZING ONE OR BOTH TABS ON ATTACHMENT H - BID PRICE SHEET.

INTRODUCTION

The City of Miami, herein referred to as the City, is soliciting response from experienced firms to provide pavement resurfacing and roadway repair services throughout the City. The Bidder must bid on all items to be considered for award of this solicitation.

SERVICES COVERED

The Successful Bidder shall furnish all labor, machinery, tools, modes of transportation, debris disposal, supplies, equipment, materials, water, diesel fuel and services necessary to perform the complete pavement resurfacing and roadway repair services anticipated as work to be performed under this contract. Complete pavement/repair service includes, but is not limited to the following:

1. Milling and resurfacing (includes controlled/variable milling to re-establish roadway longitudinal and cross slopes);
2. Installation of asphalt overlay, chip seal, fog seal, and/or micro-surfacing;
3. Removal and/or replacement of existing asphalt, lime rock, and subgrade;
4. Re-grading/reworking and compaction of lime rock road base and stabilized subgrade;
5. Widening existing streets;
6. Resurfacing of asphaltic pathways (pedestrian, bicycle, etc.);
7. Temporary utility repairs (hot mix asphalt patches);
8. Clearing, grubbing, root removal and excavation of shoulder areas;
9. Asphalt build-up removal;
10. Non-destructive pavement marking removal;
11. Thermoplastic and paint pavement markings (including all standard symbols and FDOT-approved, preformed, thermoplastic green & white bicycle lane markings);
12. Reflective pavement markers (RPMs);
13. Reflective roadway/highway delineators;
14. Repairs, removal, replacement, and extensions of concrete roadway panels, sidewalks, curb and gutter, and pedestrian ADA ramps; and
15. Adjustments to or minor repairs of utility structure manhole tops, inlet frames/grates, valve boxes, etc. within the public right-of-way.

ASSIGNMENT OF WORK

Work will be assigned to the Successful Bidder through the issuance of a work order or “task order” as written and

approved by the Department of Resilience and Public Works (RPW) and agreed upon by the Successful Bidder. Each task order will clearly define the limits and scope of work along with a required timeline for starting and completing work under that task order. Work shall be completed within the agreed-upon timeframe under each task order to avoid incurring liquidated damages or being defaulted. Task orders may or may not be accompanied by a set of engineered construction drawings; as such, the Successful Bidder may be required to work with RPW staff to fully define a task order's scope and may have to adjust their work in the field during construction, as directed by RPW staff.

REGULATIONS

The Successful Bidder shall be familiar with and follow all City of Miami RPW Design and Construction Standards, City Codes and RPW Bulletins, as well as Miami-Dade County Department of Transportation and Public Works and the State of Florida Department of Transportation standards for roadway design, construction, and permitting.

All contractors are required to follow City, County, and State requirements for pollution prevention – including submission of SWPP Plans and installation and maintenance of stormwater system protective BMPs for each project/task order. 10% retainage will be withheld on partial payments for each task order, until all work is inspected and accepted as complete by RPW Project Manager.

PERMITS

The Successful Bidder shall submit for and obtain all required local, state, and federal permits, as applicable, (e.g. Excavation, Special Events/Police, Right-of-Way Closures, NPDES, etc.) prior to mobilizing and beginning construction activities on any assigned work orders/task orders.

OVERTIME WORK HOURS

For the purpose of this contract, overtime work hours are defined as:

1. Monday thru Saturday – 6pm to 8am.
2. Sunday – at any time during the day or night.
3. City observed holidays at anytime during the day or night.

Successful Bidder(s) shall only work overtime hours, per the permitting requirements or as directed by the City. Typically, the services being conducted during these hours are milling, paving, striping, and minor concrete curb/sidewalk work.

ATTACHMENT A

INSURANCE ADDENDUM
INSURANCE DEFINITIONS, REQUIREMENTS AND CONDITIONS

The VENDOR/CONTRACTOR agrees to provide and maintain throughout the life of this contract and at Vendor/Contractor's expense insurance coverage outlined herewith as applicable insuring all operations related to the contract and any extensions thereof.

Workers Compensation and Employers Liability

Statutory and subject to the Laws of the State of Florida. This coverage protects against lawsuits stemming from workplace accidents. It provides for medical care to injured employees, along with compensation for lost income.

Commercial General Liability

It protects against accidents and injuries that occur on company property or the property of a customer. It compensates an injured person or owner of property for injuries and property damages, and the cost of defending lawsuits, including legal settlements or investigations. This policy also covers claims resulting from products exposures, libel, slander, copyright infringement and other personal and advertisement injuries.

Commercial Automobile Liability

It protects against liability, no fault, medical payments, uninsured and underinsured motorists claims, collision and other than collision physical damage. In addition, this policy affords coverage on autos that are hired or borrowed or non-owned for use in the business. The non-owned can be autos owned by employees or members of their households.

Non Owned Auto exposures can be endorsed or added under the Commercial General Liability Policy.

Professional/Errors and Omissions Liability

Used by many professionals such as engineers, lawyers, accountants, stock brokers, financial advisers, insurance agents, court reports, dentists, nurses and teachers. It protects against the financial effects of liability lawsuits filed by clients. It basically protects professionals who cause harm to a client due to incompetence, errors or negligence.

Umbrella Liability

It protects against liability and losses after primary insurance benefits have been exhausted. This supplemental coverage kicks in only after the underlined liability policies have paid their maximum benefits.

Environmental Liability

It protects against the financial costs of claims of injury or damage due to pollution, and other costs of cleaning up pollutants. These policies are designed to cover both property and liability risks.

Directors and Officers Liability

This coverage protects against claims from stockholders, employees and clients that are also aimed individually at directors and officers. These claims typically stem from errors in judgement, breaches of duty and wrongful acts in connection with company business.

Cyber Liability

It protects against costs of the theft, destruction or unauthorized use of electronic data through computer viruses or network intrusions. It also adds protection to a business against such costs if a business fails to safeguard another party's electronic data. Companies sharing data outside their internal network benefit from this coverage

Commercial Property

It protects against claims or damages to the insured's buildings, business personal property and personal property of others. It can also provide for loss of business income coverage or extra expenses incurred because of physical loss by a covered peril to the insured's property.

Commercial Crime

It protects against loss of money, securities and other property because of a variety of criminal acts such as employee theft or embezzlement, burglary, robbery, forgery, computer fraud, kidnapping and extortion. Crime insurance also covers money and securities against damage or destruction by almost any cause of loss, not just crime.

Builders Risk

It protects against damage to or destruction of buildings or other structures during their construction. Any party with a financial interest in a construction, remodeling, or repair project benefits from this coverage.

Surety Bonds

Surety bonds are three party contracts. The principal, the party that undertakes the obligation, pays for the issuance of a bond by a surety company. The bond provides capital to guarantee the obligation will be performed. The obligee is the party that receives the benefit of the bond If the obligation is improperly performed.

Valuable Papers

It pays for the cost to reconstruct damaged or destroyed valuable papers and records. Typically is defined to include almost all forms of printed documents or records with the exception of money or securities, and data and media which is usually excluded.

Additional Requirements

The Vendor/Contractor must furnish the City of Miami, Department of Procurement, and Risk Management located at 444 S.W. 2nd Avenue Miami, Florida 33130, original Certificates of insurance to be in force on the date of this Contract, and Renewal Certificates of insurance thereafter. All policies indicated on the certificate must be in compliance with all Contract requirements. The failure of the City

to obtain the applicable or corresponding certificates from Contractor is not a waiver by the City of any requirements for the Vendor/Contractor.

The Vendor/Contractor must furnish Certificates insurance listing the City of Miami as an additional insured. All insurance certificates must be signed, dated and reference the City contract number.

The insurance must provide for sixty (30) days prior written notice to be given to the City in the event coverage is substantially changed, canceled, or non-renewed.

Any deductibles or self-insured retentions on referenced insurance coverages must be borne by Vendor/Contractor. The Vendor/Contractor further agrees to have insurers waive their rights of subrogation against the City of Miami, its employees, elected officials, agents, or representatives.

The coverages and limits furnished by Vendor/Contractor in no way limit the Vendor/Contractor's liabilities and responsibilities specified within the Contract or law.

Any insurance or self-insurance programs maintained by the City of Miami shall not contribute with insurance provided by the Vendor/Contractor under the Contract.

The required insurance to be carried is not limited by any limitations expressed in the indemnification language in this Contract or any limitation placed on the indemnity in this Contract given as a matter of law.

If the Vendor/Contractor is a joint venture or limited liability company, the insurance policies must name the joint venture or Limited Liability Company and each of its separate constituent entities as named insureds.

The Vendor/Contractor must require all subcontractors to provide the insurance required herein. All subcontractors are subject to the same insurance requirements of the Vendor/Contractor unless otherwise specified in this Contract.

If the Vendor/Contractor or subcontractor desire additional coverages, the party desiring the additional coverages is responsible for the acquisition and cost. Notwithstanding any provision in the Contract to the contrary, the City of Miami Risk Management Department maintains and reserves the right to modify, delete, alter or change these requirements.

I

Attachment B: Reference Submittal Form
IFB 1115382 – Pavement Resurfacing Services

FIRM NAME: _____

Reference Section 2.14	**Summarized Requirements: Refer to the details in Section 2 Special Conditions to verify that the information provided will suffice as proof of meeting the requirements of this solicitation.**
	Past Performance Reference Check #1
	Company/Organization Name:
	Address:
	Contact Person:
	Contact Phone Number and Email:
	Date of Contract or Sale:
	Prime or Subcontractor:
	Other (Description of Service, Total dollar value of Contract, etc.):
	Past Performance Reference Check #2
	Company/Organization Name:
	Address:
	Contact Person:
	Contact Phone Number and Email:
	Contact E-mail (if applicable):
	Date of Contract or Sale:
	Prime or Subcontractor:
	Other (Description of Service, Total dollar value of Contract, etc.):
	Past Performance Reference Check #3
	Company/Organization Name:
	Address:
	Contact Person:
	Contact Phone Number and Email:
	Contact E-mail (if applicable):
	Date of Contract or Sale:
	Prime or Subcontractor:
	Other (Description of Service, Total dollar value of Contract, etc.):

POLICY NUMBER:

APM- 2-19

DATE:

March 26, 2019

ISSUED BY:
Emilio T. Gonzalez, Ph.D.
City Manager/Designee

SIGNATURE

CITY OF MIAMI

ADMINISTRATIVE POLICY

REVISIONS

REVISED SECTION	DATE OF REVISION
Created	3/26/19

SUBJECT: ELIMINATING THE PROCESS OF CURING IRREGULARITIES IN DOCUMENTS SUBMITTED IN RESPONSE TO REQUEST FOR QUALIFICATIONS (RFQ), REQUEST FOR PROPOSALS (RFP), REQUESTS FOR LETTERS OF INTEREST (RFLI), INVITATION FOR BIDS (IFB), INVITATION TO BID (ITB), INVITATION TO QUOTE (ITQ), AND REQUEST FOR SPONSORSHIP (RFS) EFFECTIVE MAY 6, 2019

PURPOSE:

To improve the procurement solicitation process in order to provide internal and external customers with a more efficient and effective procurement of goods and services for the City of Miami. This APM establishes guidelines that eliminate the process of curing irregularities in proposals and bids submitted in response to RFQs, RFPs, RFLI's IFBs, ITBs, ITQs and RFS.

BACKGROUND:

Currently, the Department of Procurement ("Procurement") allows Proposers and Bidders to cure certain deficiencies, deviations, irregularities, omissions, and/or technicalities in proposals and bids submitted to the City in response to RFQs, RFPs, RFLIs, IFBs, ITBs, ITQs and RFS.

In collaboration with the Department of Innovation and Technology ("DoIt"), Procurement has identified the process of curing as the cause of significant delays in formal solicitation process. When proposals and bids require a cure, Procurement sends out a "Notice to Cure" to Proposers and Bidders who are then given additional time to correct, complete, and re-submit the required documents. The process of curing is time intensive and delays the procurement of necessary goods and services for the City; it prolongs the due diligence review period and it stalls and delays the evaluation and selection process, resulting in the extension of time between the issuance of an RFP, RFQ, RFLI, IFB, ITB, ITQ, or RFS solicitation and its award date.

Eliminating the process of curing will streamline and improve the overall procurement solicitation process while making it more efficient by removing a source of delay, and more effective by concentrating due diligence reviews only on complete and responsive proposals and bids. Additionally, it is not a common procurement industry practice to allow cures. Other local public agencies such as Miami-Dade County and the Miami-Dade County Public School System do not presently allow cures in such similar instances.

GUIDELINES:

Procurement will only review and evaluate proposals and bids that have been deemed responsive. **Responsive bids and proposals responses are defined by our Procurement Code.**[1] Prospective Proposers and Bidders should understand that non-responsive proposals or bids will not be reviewed and will be eliminated from the evaluation and selection process.

The City will not consider the curing of any proposal or bid that fail to meet the minimum qualifications or submission requirements of an RFQ, RFP, RFLI, IFB, ITB, ITQ, or RFS as applicable. Material deficiencies, deviations, irregularities, omissions, and/or technicalities are not waivable.

Proposals and bids submitted with deficiencies, irregularities, omissions, and/or technicalities that deviate from the minimum qualifications and/or submission requirements for RFQs, RFPs, RFLIs, IFBs, ITBs, ITQs and RFS shall result in a non-responsive determination. The following list includes, but is not limited to, proposal and bid deficiencies, deviations, irregularities, omissions, and/or technicalities that shall result in a non-responsive determination for any solicitation issued on or after May 6, 2019:

If a proposal or bid is missing forms, or contains unnotarized forms, unsigned forms, incorrect forms, or forms signed by any individual, other than the Proposer or Bidder, Proposer's or Bidder's team members, and/or individuals attesting to the stated project experience, the Proposer or Bidder **will not** be given time to cure the proposal or bid, and the City shall deem such proposal or bid non-responsive. The City, at its sole discretion, reserves the right to waive minor deviations not listed above. Such minor deficiencies, deviations, irregularities, omissions, or technicalities may be timely cured by the Proposer or Bidder, at the sole discretion of the City. Material (i.e. substantial or notable) deficiencies, deviations, irregularities, omissions, or technical issues cannot be cured by the Proposer or Bidder and are not waivable by the City.

For illustrative guidance please see below an excerpt from State of Florida procurement instructions which discuss the difference in plain language between material and minor variances.

Responsive bidder, proposer, offeror, or *respondent* means a business which has submitted a bid, offer, proposal, quotation or response which conforms in all material respects to the solicitation. Sec. 18-73, City Code.

(Excerpt from 2012 WL 1155290 (Fla.Div.Admin.Hrgs.)

Mandatory Responsiveness Requirements: Terms, conditions or requirements that must be met by the proposer to be responsive to this RFP. The responsiveness requirements are **mandatory**. Failure to meet the responsiveness requirements will cause rejection of a proposal. Any proposal rejected for failure to meet mandatory responsiveness requirements will not be evaluated.

1.15 Material Deviations: The Department has established certain requirements with respect to proposals to be submitted by Proposers. The use of *shall, must* or *will* (except to indicate simple futurity) in this RFP indicates a requirement or condition which may not be waived by the Department except where any **deviation** therefore is not **material**. A **deviation** is **material** if, in the Department's sole discretion, the deficient response is not in substantial accord with this RFP's requirements, provides an advantage to one Proposer over other Proposers, or has a potentially significant effect on the quantity or quality of items or services proposed, or on the cost to the Department. **Material deviations** cannot be waived and shall be the basis for rejection of a response. Because this is an RFP, the Department will apply this definition liberally in reviewing responses in regard to service delivery.

1.16 Minor Irregularity: A variation from the RFP terms and conditions which does not affect the price proposed or gives the proposer an advantage or benefit not enjoyed by the other proposers or does not adversely impact the interests of the Department.

ATTACHMENT D

Title: PAVEMENT RESURFACING IFB No.: 1115382

List of Subcontractors

Completion of Form

to be updated after award of the Contract as additional Subcontractors are added or changed. Submit additional pages as neceassary.

Name of Firm	Address	Scope of Work	Licenses	Value of Work	% of Work

Note:

1. The work performed by Subcontractor(s) listed cannot equal more than fiftenn percent (15%) of the total work for the Contract.
2. The foregoing list of Subcontractors may not be amended after award of the Contract without the prior written approval of the City's Project Manager identified in the Solicitation, whose approval will not be unreasonableley withheld.

Name of Proposer: _____ Date: _____

Name of Individual Completing Form: _____ Signature: _____

"General Decision Number: FL20200178 01/03/2020

Superseded General Decision Number: FL20190178

State: Florida

Construction Type: Highway

County: Miami-Dade County in Florida.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020

* ELEC0349-002 09/02/2019

	Rates	Fringes
ELECTRICIAN	$ 35.36	12.77

SUFL2013-039 08/19/2013

	Rates	Fringes
CARPENTER	$ 17.84	0.00
CEMENT MASON/CONCRETE FINISHER, Includes Form Work	$ 15.49	0.00
FENCE ERECTOR	$ 12.82	0.00
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine)	$ 15.07	0.00
HIGHWAY/PARKING LOT STRIPING:		

Painter	$ 12.13	0.00
HIGHWAY/PARKING LOT STRIPING: Operator (Spray Nozzleman)	$ 11.16	0.00
INSTALLER - GUARDRAIL	$ 13.43	0.00
IRONWORKER, ORNAMENTAL	$ 13.48	0.00
IRONWORKER, REINFORCING	$ 18.43	0.00
IRONWORKER, STRUCTURAL	$ 16.42	0.00
LABORER (Traffic Control Specialist incl. placing of cones/barricades/barrels - Setter, Mover, Sweeper)	$ 11.59	0.00
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor	$ 12.31	0.00
LABORER: Common or General	$ 10.69	0.00
LABORER: Flagger	$ 12.53	0.00
LABORER: Grade Checker	$ 12.41	0.00
LABORER: Landscape & Irrigation	$ 9.02	0.00
LABORER: Mason Tender - Cement/Concrete	$ 13.91	3.50
LABORER: Pipelayer	$ 15.02	0.00
OPERATOR: Backhoe/Excavator/Trackhoe	$ 16.24	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader	$ 12.88	0.00
OPERATOR: Boom	$ 18.95	0.00
OPERATOR: Boring Machine	$ 15.29	0.00
OPERATOR: Broom/Sweeper	$ 13.01	0.00
OPERATOR: Bulldozer	$ 16.77	0.00
OPERATOR: Concrete Finishing Machine	$ 15.44	0.00
OPERATOR: Concrete Saw	$ 14.43	0.00
OPERATOR: Crane	$ 22.46	0.00
OPERATOR: Curb Machine	$ 20.74	0.00
OPERATOR: Distributor	$ 13.29	0.00
OPERATOR: Drill	$ 14.78	0.00
OPERATOR: Forklift	$ 16.32	0.00

OPERATOR: Gradall.....$ 14.71 0.00

OPERATOR: Grader/Blade.....$ 20.22 3.85

OPERATOR: Loader.....$ 15.53 0.00

OPERATOR: Mechanic.....$ 18.03 0.00

OPERATOR: Milling Machine.....$ 14.67 0.00

OPERATOR: Oiler.....$ 16.32 0.00

OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....$ 13.61 0.00

OPERATOR: Piledriver.....$ 17.23 0.00

OPERATOR: Post Driver (Guardrail/Fences).....$ 14.45 0.00

OPERATOR: Roller.....$ 13.67 0.00

OPERATOR: Scraper.....$ 12.01 0.00

OPERATOR: Screed.....$ 14.15 0.00

OPERATOR: Tractor.....$ 12.19 0.00

OPERATOR: Trencher.....$ 14.74 0.00

PAINTER: Spray.....$ 16.52 0.00

SIGN ERECTOR.....$ 12.96 0.00

TRAFFIC SIGNALIZATION: Traffic Signal Installation.....$ 19.07 0.00

TRUCK DRIVER: Distributor Truck.....$ 14.96 2.17

TRUCK DRIVER: Dump Truck.....$ 12.19 0.00

TRUCK DRIVER: Flatbed Truck.....$ 14.28 0.00

TRUCK DRIVER: Lowboy Truck.....$ 15.07 0.00

TRUCK DRIVER: Slurry Truck.....$ 11.96 0.00

TRUCK DRIVER: Vactor Truck.....$ 14.21 0.00

TRUCK DRIVER: Water Truck.....$ 13.17 1.60

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year.

Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the

interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION
"

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his/her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officers or employee of Congress, or an employee or a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form, LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that ll subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31, U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Signature of Contractor/Contractor's Authorized Official

_____

Name and Title of Contractor/Contractor's Authorized Official

_____

Date: _____

CITY OF MIAMI LOCAL OFFICE CERTIFICATION

(City Code, Chapter 18, Article III, Section 18-73)

Solicitation Type and Number: _____ (i.e. IFQ/IFB/RFP/RFQ/RFLI No. 123456)

Solicitation Title: _____

_____ (Bidder/Proposer) hereby certifies compliance with the *Local Office* requirements stated under Chapter 18/Article III, Section 18-73, of the Code of the City of Miami, Florida, as amended.

Local office means a business within the city which meets all of the following criteria:

(1) Has had a staffed and fixed office or distribution point, operating within a permanent structure with a verifiable street address that is located within the corporate limits of the city, for a minimum of twelve (12) months immediately preceding the date bids or proposals were received for the purchase or contract at issue; for purposes of this section, "staffed" shall mean verifiable, full-time, on-site employment at the local office for a minimum of forty (40) hours per calendar week, whether as a duly authorized employee, officer, principal or owner of the local business; a post office box shall not be sufficient to constitute a local office within the city;

(2) If the business is located in the permanent structure pursuant to a lease, such lease must be in writing, for a term of no less than twelve (12) months, been in effect for no less than the twelve (12) months immediately preceding the date bids or proposals were received, and be available for review and approval by the chief procurement officer or its designee; for recently-executed leases that have been in effect for any period less than the twelve (12) months immediately preceding the date bids or proposals were received, a prior fully-executed lease within the corporate limits of the city that documents, in writing, continuous business residence within the corporate limits of the city for a term of no less than the twelve (12) months immediately preceding the date bids or proposals were received shall be acceptable to satisfy the requirements of this section, and shall be available for review and approval by the chief procurement officer or its designee; further requiring that historical, cleared rent checks or other rent payment documentation in writing that documents local office tenancy shall be available for review and approval by the chief procurement officer or its designee;

(3) Has had, for a minimum of twelve (12) months immediately preceding the date bids or proposals were received for the purchase or contract at issue, a current business tax receipt issued by both the city and Miami-Dade County, if applicable; and

(4) Has had, for a minimum of twelve (12) months immediately preceding the date bids or proposals were received for the purchase or contract at issue, any license or certificate of competency and certificate of use required by either the city or Miami-Dade County that authorizes the performance of said business operations; and

(5) Has certified in writing its compliance with the foregoing at the time of submitting its bid or proposal to be eligible for consideration under this section; provided, however, that the burden of proof to provide all supporting documentation in support of this local office certification is borne by the business applicant submitting a bid or proposal.

PLEASE PROVIDE THE FOLLOWING INFORMATION:

Bidder/Proposer Local Office Address: _____

Does Bidder/Proposer conduct verifiable, full-time, on-site employment at the local office for a minimum of forty (40) hours per calendar week?	☐ YES ☐ NO
If Bidder/Proposer's Local Office tenancy is pursuant to a lease, has Bidder/Proposer enclosed a copy of the lease?	☐ YES ☐ NO ☐ N/A
Has Bidder/Proposer enclosed a copy of the Business Tax Receipt (BTR) issued by the City of Miami and Miami-Dade County?	City of Miami: ☐ YES ☐ NO ☐ Exempt Cite Exemption: _____ _____ Miami-Dade County: ☑ YES ☑ NO ☐ Exempt Cite Exemption: _____ _____
Has Bidder/Proposer enclosed a copy of the license, certificate of competency and certificate of use that authorizes the performance of Bidder/Proposer's business operations?	☐ YES ☐ NO

Bidder/Proposer's signature below certifies compliance with the *Local Office* requirements stated under Chapter 18/Article III, Section 18-73, of the Code of the City of Miami, Florida, as amended.

_____

Print Name (Bidder/Proposer Authorized Representative)

_____ _____

Signature Date

STATE OF FLORIDA
COUNTY OF _____

Certified to and subscribed before me this _____ day of _____, 20_____, by

_____.

_____
(Signature of Notary Public-State of Florida)

(NOTARY SEAL)

_____
(Name of Notary Typed, Printed, or Stamped)

Personally Known _____OR Produced Identification _____

Type of Identification Produced_____

CITY OF MIAMI, FLORIDA

INTER-OFFICE MEMORANDUM

TO: Arthur Noriega V
City Manager

DATE: October 23, 2020

SUBJECT: Recommendation of Award for Pavement Resurfacing Services

FROM: Yadissa A. Calderon for
Annie Perez, CPPO, Director
Department of Procurement

REFERENCES: Invitation for Bid ("IFB") No. 1115382

ENCLOSURES: Bid Tabulation

RECOMMENDATION:

Based on the findings below, the Department of Procurement ("Procurement") hereby recommends award ofIFB No. 1115382 to H&R Paving, Inc. ("H&R Paving") the apparent responsive and responsible Bidder, for the provision of pavement resurfacing services for the Department of Resilience and Public Works ("Public Works"), on an as needed basis. The warded vendor, contract terms, and amount are shown below.

Contract Number/Title: IFB No. 1115382, Pavement Resurfacing Services

Contract Amount: The estimated contract amount is approximately $200,181.50 annually for Group 1 – Non-Federally Funded Projects and $200,186.48 annually for Group – 2 Federally Funded Projects (approximately $1,401,270.50 for Group 1; and $1,401,305.36 for Group 2 for all seven (7) years).

Contract Term: Initial term for a period of three (3) years, with the option to renew for two (2) additional two (2) year periods.

Recommended Vendors: H&R Paving, Inc.

BACKGROUND:

On September 11, 2020, Procurement on behalf of Public Works issued IFB No. 1115382, Pavement Resurfacing Services, under full and open competition. On October 9, 2020 at bid closing three (3) bids were received. The bids were evaluated and tabulated following the guidelines published in the bid. Two (2) bids were found to be non-responsive. H&R was the responsive and responsible Bidder.

Consequently, approval of this recommendation to award is requested. Your signature below will indicate approval of this recommendation.

Approved: _____ Date: 10/29/20
Arthur Noriega V. City Manager

AP:tg

c:
Nzeribe Ihekwaba, Ph.D, P.E., Assistant City Manager, Chief of Infrastructure
Juvenal Santana, P.E., Director, Public Works
Yadissa A. Calderon, CPPB, Assistant Director, Procurement

PR21015

GROUP 1 - NON-FEDERALLY FUNDED PROJECTS					H&R Paving		
Line Item	Item Description	Unit	Quantity		Unit Cost	BAFO	Total
1	**MOBILIZATION, ROADWAY COMPLETE** - Mobilization cost for task orders consisting of complete roadway/right-of-way work. Typically consists of many, multiple line items of work and may include all trades required to execute all line items of work within this contract. Most "Roadway Complete" task orders will mainly consist of milling & resurfacing/overlay/etc. with striping, utility adjustments, curb & gutter, minor sidewalk and swale work, and ADA ramps (1 mobilization per task order).	LS	1		$ 5,000.00	N/A	$ 5,000.00
2	**MOBILIZATION, ASPHALT** - Mobilization cost for task orders mainly consiting of milling & resurfacing/overlay/etc. with associated utility adjustments and striping work only (1 mobilization per task order).	LS	1		$ 1.00	N/A	$ 1.00
3	**MOBILIZATION, PATCHING** - Mobilization cost for task orders mainly consisting of utility trench and/or pothole patching requests and/or requests for roadway base soil condition investigations (1 mobilization per task order - 1 block of trench or 10 potholes per task order typ.).	LS	1		$ 1.00	N/A	$ 1.00
4	**MOBILIZATION, SIDEWALKS/CURBING** - Mobilization cost for task orders mainly consisting of concrete sidewalks, ADA ramps, and/or curb & gutter work only, includes associated minor asphalt patching where necessary (1 mobilization per task order).	LS	1		$ 1,500.00	N/A	$ 1,500.00
5	**MOBILIZATION, STRIPING** - Mobilization cost for task orders mainly consisting of paint/thermoplastic striping, messages, symbols, and/or bike/bus lane coating work only (1 mobilization per task order).	LS	1		$ 300.00	N/A	$ 300.00
6	**MOBILIZATION, ASPHALT STAMPING/PAINTING** - Mobilization cost for task orders mainly consisting of thermal stamping and/or colorized coating of specialty asphalt treatment areas (1 mobilization per task	LS	1		$ 1.00	N/A	$ 1.00
7	**RE-MOBILIZATION** - For use only if paving equipment and/or sidewalk/conctete crews already de-mobilized from site, to address additional milling & resurfacing and/or ADA ramps as requested by Public Works Staff (1 mobilization per task order amendment)	LS	1		$ 1.00	N/A	$ 1.00
8	**NIGHTTIME/SUNDAY WORK ADD-ON** - This is a lump sum, cost-per-day, add-on, to be paid when a contractor is required to work, per permitting requirements or as directed by Public Works Staff, on Sundays or at night. This pay item is to help compensate for increased costs associated with overtime labor and enhanced MOT requirements in order to carry out work during non-standard working hours. Typical work being conducted under this add-on will mainly consist of milling, paving, striping, and minor	EA/DAY	1		$ 5,000.00	N/A	$ 5,000.00
9	**ROADWAY BASE SOIL ASSESSMENT, CONDITION A** - Saw cut and remove an average of 2" thick existing asphalt to expose and evaluate the condition of the base. If base is found suitable to the City of Miami's Public Works Staff, clean loose material, recompact, and replace removed asphalt with Type SP-9.5 hot mix asphaltic concrete up to the level of the surrounding surface.	SF	1		$ 3.00	N/A	$ 3.00
10	**ROADWAY BASE SOIL ASSESSMENT, CONDITION B** - Saw cut and remove an average of 2" thick existing asphalt to expose and evaluate the condition of the base. If base is found unsuitable to the City of Miami's Public Works Staff, remove base material and replace with a minimum of 8" of compacted limerock (LBR 100) and 2" of Type SP-9.5 hot mix asphaltic concrete, or 6" of SP-9.5 hot mix asphaltic concrete, up to the level of the surrounding surface.	SF	1		$ 3.00	N/A	$ 3.00
11	**BARRICADES CONES/DRUMS** - Temporary, the first 50 cones and/or drums are considered incidental to all required work under each task order and not compensated for, drums incl. lights when required, includes installation, maintenance, and removal.	EA/DAY	1		$ 0.50	$ 0.45	$ 0.45
12	**BARRICADES TYPE II** - Temporary, 2'-3', with flashing lights when required, includes installation, maintenance, and removal.	EA/DAY	1		$ 0.50	$ 0.45	$ 0.45

13	**BARRICADES TYPE III** - Temporary, 6'-8', with flashing lights when required, includes installation, maintenance, and removal.	EA/DAY	1		$ 0.50	$ 0.45	$ 0.45
14	**WORK ZONE SIGNAGE** - Includes all message and detour signage required per approved MOT plans, the first 10 signs are considered incidental to all required work under each task order and not compensated for, includes installation, maintenance, and removal.	EA/DAY	1		$ 100.00	N/A	$ 100.00
15	**FLASHING ARROW BOARD** - Temporary, multi-mode, includes installation, maintenance, and removal.	EA/DAY	1		$ 10.00	N/A	$ 10.00
16	**VARIABLE MESSAGE SIGN (VMS)** - Message text to be as approved by City Staff or as required by FDOT and County permitting, includes installation, maintenance, and removal.	EA/DAY	1		$ 25.00	N/A	$ 25.00
17	**RE-GRADE EXISTING SWALE** - Includes removal and disposal of excess material if necessary.	SY	1		$ 50.00	N/A	$ 50.00
18	**BAHIA GRASS SOD** - Includes watering for establishment period.	SF	1		$ 5.00	N/A	$ 5.00
19	**ST AUGUSTINE FLORATAM GRASS SOD** - Includes watering for establishment period.	SF	1		$ 5.00	N/A	$ 5.00
20	**ASPHALT REMOVAL 0-2"** - Removal and disposal of asphalt averaging 2" thick or less, includes sawcutting edges of existing asphalt to remain.	SY	1		$ 25.00	N/A	$ 25.00
21	**ASPHALT REMOVAL 2"-4"** - Removal and disposal of asphalt averaging over 2" up to 4" thick, includes sawcutting edges of existing asphalt to remain.	SY	1		$ 25.00	N/A	$ 25.00
22	**ASPHALT REMOVAL >4"** - Removal and disposal of asphalt over 4" thick, includes sawcutting edges of existing asphalt to remain.	SY	1		$ 25.00	N/A	$ 25.00
23	**CONCRETE REMOVAL 0-6"** - Removal and disposal of concrete pads, sidewalks, or roadway pavement averaging 6" thick or less, includes sawcutting edges of existing pad/sidewalk/road section to remain.	SF	1		$ 2.79	N/A	$ 2.79
24	**CONCRETE REMOVAL 6"-12" -** Removal and disposal of concrete pads, sidewalks, or roadway pavement averaging over 6" up to 12" thick, includes sawcutting edges of existing pad/sidewalk/road section to	SF	1		$ 5.00	N/A	$ 5.00
25	**EXCAVATION** - Excavation and removal of excess soils as shown on design plans or directed by Public Works Staff.	CY	1		$ 30.00	N/A	$ 30.00
26	**STABILIZED SUBGRADE** - F&I Type "B" stabilized backfill to the thickness shown on design plans or directed by Public Works Staff, installed and compacted in lifts per City Standards (LBR 40 min. - compaction and testing required and included).	CY	1		$ 20.00	N/A	$ 20.00
27	**LIMEROCK BASE** - F&I limerock base course to the thickness shown on design plans or as directed by Public Works Staff, installed and compacted in lifts per City Standards (LBR 100 - compaction and testing required and included).	CY	1		$ 30.00	N/A	$ 30.00
28	**MILL AND DISPOSE EXISTING ASPHALT** - 1" average thickness, includes sawcutting edges of existing asphalt surfaces to remain.	SY	1		$ 5.00	N/A	$ 5.00
29	**MILL AND DISPOSE EXISTING ASPHALT, ADD-ON** - Additive pricing for each 1/4" of additional thickness of milling (to be used when milling more than 1" average thickness).	SY	1		$ 1.00	N/A	$ 1.00
30	**1" SUPERPAVE ASPHALT, TYPE SP-9.**5 - Traffic C, includes tack coat where necessary.	SY	1		$ 7.00	N/A	$ 7.00
31	**1.5" SUPERPAVE ASPHALT, TYPE SP-9.5 or SP-12.5-** Traffic C, includes tack coat where necessary.	SY	1		$ 10.41	N/A	$ 10.41
32	**2" SUPERPAVE ASPHALT, TYPE SP-9.5 or SP-12.5 -** Traffic C, includes tack coat where necessary.	SY	1		$ 14.00	N/A	$ 14.00
33	**1" SUPERPAVE ASPHALT FRICTION COURSE, TYPE FC-9.5** - Traffic C, PG 76-22, includes tack coat where necessary.	SY	1		$ 8.00	N/A	$ 8.00
34	**1.5" SUPERPAVE ASPHALT FRICTION COURSE, TYPE FC-9.5 or FC-12.5 -** Traffic C, PG 76-22, includes tack coat where necessary.	SY	1		$ 12.00	N/A	$ 12.00
35	**2" SUPERPAVE ASPHALT FRICTION COURSE, TYPE FC-9.5 or FC-12.5 -** Traffic C, PG 76-22, includes tack coat where necessary.	SY	1		$ 16.00	N/A	$ 16.00

36	**POTHOLE REPAIRS** - Placement of crushed and compacted limerock and hot mix asphalt to patch potholes, 10 sq.ft. max surface area, and no deeper than 1.5' deep (asphalt to be a minimum of 2" thick, Type SP-9.5, compacted hot mix).	SF	1		$ 5.00	N/A	$ 5.00
37	**CRACK SEAL** - Sealing of asphalt roadway cracks less than 2" wide by application of a bituminous asphalt sealant specifically designed for crack sealing.	LF	1		$ 5.00	N/A	$ 5.00
38	**UTILITY ADJUSTMENT, STORMWATER INLET** - Raise or lower stormwater inlet frame and grate, includes brick and concrete morter as necessary.	EA	1		$ 250.00	N/A	$ 250.00
39	**UTILITY ADJUSTMENT, MANHOLE** - Raise or lower utility manhole frame/rim and cover, includes brick and concrete morter as necessary.	EA	1		$ 500.00	N/A	$ 500.00
40	**UTILITY ADJUSTMENT, VALVE BOX** - Raise or lower utility valve boxes, includes flowable fill or cast-in-place concrete ring as necessary.	EA	1		$ 300.00	N/A	$ 300.00
41	**REMOVE/DISPOSE/REPLACE DAMAGED MANHOLE/INLET FRAME, MD-COUNTY** - Removal and disposal of damaged drainage inlet frame and grate or utility manhole frame and lid, includes coordinating with and picking up new frames/grates/lids from Miami-Dade Water and Sewer Department, also includes re-	EA	1		$ 500.00	N/A	$ 500.00
42	**REMOVE/DISPOSE/REPLACE DAMAGED VALVE COVER, MD-COUNTY** - Removal and disposal of damaged water or sewer valve box, includes coordinating with and picking up new frames/grates/lids from Miami-Dade Water and Sewer Department, also includes re-installation.	EA	1		$ 500.00	N/A	$ 500.00
43	**REPAIR CONCRETE MANHOLE/INLET** - Repair of damaged concrete utility manhole or drainage inlet	EA	1		$ 1,000.00	N/A	$ 1,000.00
44	**CONCRETE CURB AND GUTTER REMOVAL** - Removal and disposal of all types of existing concrete curbing and curb & gutter (existing limerock pad to remain if new curbing is being installed).	LF	1		$ 15.00	N/A	$ 15.00
45	**CONCRETE CURB, NON-REINFORCED** - Type "B," "D," "A," and all other standard curb types without gutter (limerock pad to be paid under separate line item, if necessary).	LF	1		$ 25.00	N/A	$ 25.00
46	**CONCRETE CURB, REINFORCED** - Steel reinforced Type "B," "D," "A," and all other standard reinforced curb types without gutter (limerock pad to be paid under separate line item, if necessary).	LF	1		$ 36.00	N/A	$ 36.00
47	**CONCRETE CURB AND GUTTER, NON-REINFORCED** - Type "F," "E," "RA," and all other standard types of curbing with gutters (limerock pad to be paid under separate line item, if necessary).	LF	1		$ 25.00	N/A	$ 25.00
48	**CONCRETE CURB AND GUTTER, REINFORCED** - Steel reinforced Type "F," "E," "RA," and all other standard types of reinforced curbing with gutters (limerock pad to be paid under separate line item, if necessary).	LF	1		$ 36.00	N/A	$ 36.00
49	**CONCRETE DROP CURB OR VALLEY GUTTER, NON-REINFORCED** - Non-steel reinforced drop curb or valley gutter (limerock pad to be paid under separate line item, if necessary).	LF	1		$ 25.00	N/A	$ 25.00
50	**CONCRETE DROP CURB OR VALLEY GUTTER, REINFORCED** - Steel reinforced drop curb or valley gutter (limerock pad to be paid under separate line item, if necessary).	LF	1		$ 36.00	N/A	$ 36.00
51	**LIMEROCK CURB AND GUTTER PAD** - Installation and compaction of limerock base for all types of curbing and curb & gutter, to be installed per City Standards and paid by linear foot of new curbing being installed on top (to be used ONLY under new curbing where existing curbing did not previously exist).	LF	1		$ 8.00	N/A	$ 8.00
52	**6" THICK CONCRETE SIDEWALK OR DRIVEWAY PAD** - 3,000 PSI @ 28 days min. concrete sidewalks, driveway pads, and pedestrian ramps (includes adjustment/resetting of pull boxes, water meter boxes, and sanitary clean-outs within the sidewalk, and general compaction/tamping of in-situ soils remaining as a sidewalk base, as necessary).	SF	1		$ 6.60	N/A	$ 6.60
53	**8"-12" THICK CONCRETE SIDEWALK OR DRIVEWAY PAD** - 3,000 PSI @ 28 days min (includes adjustment/resetting of pull boxes, water meter boxes, and sanitary clean-outs within the sidewalk, and general compaction/tamping of in-situ soils remaining as a sidewalk base, as necessary).	SF	1		$ 10.00	N/A	$ 10.00

54	**HIGH STRENGTH CONCRETE DRIVEWAY PAD OR ROADWAY SEGMENT PATCH** - 5,000 PSI @ 28 days min (includes adjustment/resetting of pull boxes, water meter boxes, and sanitary clean-outs within the area of construction, and general compaction/tamping of in-situ soils, as necessary).	CY	1		$ 200.00	N/A	$ 200.00
55	REMOVE, STORE, AND RESET PAVERS **- Removal and resetting of existing sidewalk, driveway, or roadway pavers. Includes regrading and compacting of rock sub-base, reinstalling sand** setting/leveling base, resetting pavers to match existing patterns, and sand-filling of joints. Pavers broken during construction to be replaced, in-kind, at contractors expense.	SF	1		$ 10.00	N/A	$ 10.00
56	**DETECTABLE WARNINGS** - Truncated ADA tactile domes for ADA pedestrian ramps (Armor Tile - Cast In Place or approved equal)	SF	1		$ 50.00	$ 45.00	$ 45.00
57	**ROADSIDE SIGNS, SINGLE POST** - Typical/common traffic signage (e.g. stop, street name, yield, do not enter, one way, etc.), includes post and sign per Miami-Dade County Standards (signage surface area less than 12 SF total per assembly).	AS	1		$ 360.00	N/A	$ 360.00
58	**ROADSIDE SIGNS, SIGN ONLY** - F&I new traffic signage on existing sign post (e.g. stop, street name, yield, do not enter, one way, etc.), includes removal and disposal of old sign(s) if necessary (signage surface area less than 12 SF total per assembly).	AS	1		$ 180.00	N/A	$ 180.00
59	**RELOCATE/RESET EXISTING POST AND SIGN** - Remove and relocate, or reset leaning, existing traffic signage, single post.	EA	1		$ 240.00	N/A	$ 240.00
60	**ROADWAY/HIGHWAY DELINEATOR** - 36"-48" High, reflective delineators as approved by FDOT.	EA	1		$ 72.00	N/A	$ 72.00
61	**REFLECTIVE PAVEMENT MARKERS (RPMs)** - Class B, mono or bi-directional, all colors.	EA	1		$ 4.20	N/A	$ 4.20
62	**PAVEMENT MARKING REMOVAL** - Non-destructive micro-planing, grinding, or other approved methods, as directed by Public Works Staff (paid by LF of actual stripe removal, regardless of width of existing	LF	1		$ 1.20	N/A	$ 1.20
63	**THERMOPLASTIC PAVEMENT MESSAGES** - Reflective "ONLY," "MERGE," "SCHOOL," "RxR," etc. roadway messages, per FDOT or Miami-Dade Standards (includes temporary paint messages when necessary).	EA	1		$ 216.00	N/A	$ 216.00
64	**THERMOPLASTIC DIRECTIONAL ARROWS** - Reflective arrow symbols per FDOT or Miami-Dade Standards (includes temporary paint symbols when necessary).	EA	1		$ 96.00	N/A	$ 96.00
65	**THERMOPLASTIC BIKE LANE MARKINGS** - Sharrows and bike symbols with arrows, with or without green high-emphasis background, as directed by Public Works Staff and approved by FDOT and Miami-Dade	EA	1		$ 360.00	N/A	$ 360.00
66	**GREEN BIKE LANE COATINGS** - Installation of green asphalt coatings for designated bike lanes as directed by Public Works Staff and approved by the FDOT through the FHWA.	SY	1		$ 144.00	N/A	$ 144.00
67	**RED BUS LANE COATINGS** - Installation of red asphalt coatings for County-designated Bus Lanes, as directed by Public Works Staff and approved by Miami-Dade County.	SY	1		$ 144.00	N/A	$ 144.00
68	**SOLID SINGLE 6" THERMOPLASTIC STRIPING** - All colors, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 2.40	N/A	$ 2.40
69	**SOLID DOUBLE 6" THERMOPLASTIC STRIPING** - Double yellow, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 4.80	N/A	$ 4.80

70	**SOLID SINGLE 8" THERMOPLASTIC STRIPING** - All colors, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 1.20	N/A	$ 1.20
71	**SOLID DOUBLE 8" THERMOPLASTIC STRIPING** - Double yellow, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 1.20	N/A	$ 1.20
72	**SOLID SINGLE 12" THERMOPLASTIC STRIPING** - All colors, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 3.60	N/A	$ 3.60
73	**SOLID SINGLE 18" THERMOPLASTIC STRIPING** - All colors, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 4.80	N/A	$ 4.80
74	**SOLID SINGLE 24" THERMOPLASTIC STRIPING** - All colors, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 6.00	N/A	$ 6.00
75	**THERMOPLASTIC GUIDELINES** - 2'-4', 6'-10', or 3'-9' dotted, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 2.40	N/A	$ 2.40
76	**THERMOPLASTIC 10'-30' SKIP LINE**S - 6" yellow or white, reflective, per FDOT or Miami-Dade Standards (includes temporary paint when necessary).	LF	1		$ 2.40	N/A	$ 2.40
77	**PATTERNED ASPHALT STAMPING** - Heat-applied, wire rope cable stamping of new or existing asphalt, pattern to match existing or per design drawings (materials, methods, and certifications to be "StreetPrint" by GAF or approved equal).	SF	1		$ 20.00	N/A	$ 20.00
78	**STAMPED ASPHALT PAINTING** - Multi-layered, heat island reducing, non-slip, traffic-rated colored coating to be installed to match existing color patterns or per design drawings (materials, methods, and certifications to be "StreetBond" by GAF or approved equal).	SF	1		$ 30.00	N/A	$ 30.00
79	**DESIGN, PERMIT, INSTALL RAPID FLASHING BEACON** - All materials and labor required to design, permit, and install a complete rapid flashing pedestrian warning beacon assembly. City will provide basis-of-design sample drawings from previous installations (County permitting fees included).	EA	1		#########	N/A	$ 30,000.00
80	**REPLACE TRAFFIC LOOP** - Remove and replace existing traffic loops when repaving intersections if existing loop is damaged or if directed by Miami-Dade County (County permitting fees included).	EA	1		$ 2,500.00	N/A	$ 2,500.00
81	**Special Provision 1** = Contingency Allowance - Unforseen Conditions						$50,000
82	**Special Provision 2** = Contingency Allowance - Off Duty Police Traffic Control						$100,000
Total Cost including Contingency Allowance							$ 200,176.35

Director's Approval: _____

CITY OF MIAMI, FLORIDA

INTER-OFFICE MEMORANDUM

TO: Arthur Noriega V
City Manager

DATE: November 23, 2020

SUBJECT: Recommendation of Award for Pavement Resurfacing Services

FROM: Annie Perez, CPPO, Director
Department of Procurement

REFERENCES: IFB No. 1115382

ENCLOSURES: Bid Tabulation; Award Recommendation Dated 10/29/20; Rescission of Award Memo dated 10/29/20; Best and Final Offer Letter ("BAFO")

RECOMMENDATION:

Based on the findings below, the Procurement Department ("Procurement") hereby recommends the award of Invitation for Bid ("IFB") No. 1115382 to H&R Paving, Inc. ("H&R Paving") the apparent responsive and responsible Bidder, for the provision of pavement resurfacing services for the Department of Resilience and Public Works ("Public Works"), on an as needed basis. The awarded vendor, contract terms, and amount are shown below.

Contract Number/Title: IFB No. 1115382, Pavement Resurfacing Services

Contract Amount: The estimated contract amount is approximately $200,176.35 annually for Group 1 – Non-Federally Funded Projects and $200,181.33 annually for Group – 2 Federally Funded Projects (approximately $1,401,234.45 and $1,401,269.31 respectively for all seven (7) years).

Contract Term: Initial term of three (3) years, with the option to renew for two (2) additional two (2) year periods.

Recommended Vendors: H&R Paving, Inc. ("H&R Paving")

BACKGROUND:

On September 11, 2020, Procurement issued IFB No. 1115382 for the provision of Pavement Resurfacing Services, under full and open competition. On October 9, 2020 at bid closing three (3) bids were received. The bids were evaluated following the guidelines published in the soliciation. Two (2) bids were found to be non-responsive. H&R was the responsive and responsible Bidder. On October 29, 2020,an award was recommended and approved (please see attached), however after further discussion with Public Works, on November 16, 2020, a BAFO letter (please see attached) was issued to H&R to request additional savings on their original bid pricing submittal. H&R returned the BAFO providing a savings of $36.05 for each group over the course of the contract. Public Works has approved the BAFO.

Consequently, approval of this recommendation to award is requested. Your signature below will indicate approval of this recommendation.

Approved: _____ Date: 12/21/20

Arthur Noriega V. City Manager

AP:tg

c: Fernando Casamayor, Assistant City Manager/Chief Financial Officer
Nzeribe Ihekwaba, Ph.D, P.E., Assistant City Manager, Chief of Infrastructure
Alan Dodd, P.E., Director/Chief Resilience Officer, Resilience and Public Works
Yadissa A. Calderon, CPPB, Assistant Director, Procurement

AGENDA ITEM SUMMARY FORM

File ID: #8453

Date: 01/07/2021

Requesting Department: Department of Resilience and Public Works

Commission Meeting Date: 03/11/2021

Sponsored By:

District Impacted: All

Type: Resolution

Subject: Accept Bid - H&R Paving, Inc.

Purpose of Item:

The nature of this item is to authorize a resolution of the Miami City Commission, accepting the bid received on October 9, 2020 pursuant to IFB 1115382 from the lowest responsive and responsible bidder, H&R Paving, Inc. ("H&R Paving") for the provision of pavement resurfacing services, on and as-needed basis, for the Department of Resilience and Public Works (“Public Works”), on an as needed basis, for an initial term of three (3) years, with the option to renew for two (2) additional two (2) year periods, allocating funds from Public Works' Account No. 40-B73102E and other funding sources, subject to the availability of funds and budget approval at the time of need; authorizing the City Manager to negotiate and execute all other documents, including any amendments, renewals, and extensions, subject to allocations, appropriations and prior budgetary approvals, and in compliance with all applicable provisions of the Code of the City of Miami, Florida, as amended, ("City Code"), including, the City of Miami's Procurement Ordinance, Anti-Deficiency Act, and Financial Integrity Principles, all as set forth in Chapter 18 of the City Code, in a form acceptable to the City Attorney, and in compliance with all applicable laws, rules, and regulations, as may be deemed necessary for said purpose.

Background of Item:

On September 11, 2020, the Department of Procurement (“Procurement”), on behalf of Public Works issued IFB No. 1115382, Pavement Resurfacing Services, on an as-needed basis, under full and open competition to obtain the services of an experienced and qualified Bidder for the purpose of providing pavement resurfacing and roadway repair services. On October 9, 2020, three (3) bids were received. Two (2) vendors were deemed non-responsive, Procurement is recommending award to H&R Paving, which met all requirements, per the bid specifications, and is the apparent and responsive and responsible bidder. The estimated contract amount is approximately $200,176.35 annually for Group 1 - Non-Federally Funded Projects; and $200,181.33 annually for Group 2 - Federally Funded Projects (approximately $1,401,234.45 for Group 1 and $1,401,269.31 for Group 2 for all seven (7) years.

Budget Impact Analysis

Item is an Expenditure
Item has NO budget impact
Item is NOT funded by Bonds

Total Fiscal Impact:
$200,176.35 annually Group 1; $200,181.33 annually Group 2; See background notes.
General Account No.: 40-B73102E

Reviewed By

Department of Resilience and Public Works Review	Completed	01/07/2021 11:34 AM	Juvenal Santana	Department Head
Office of Management and Budget	Calvin Fifer	Budget Analyst Review	Completed	01/13/2021 6:15 PM
Office of Management and Budget	Leon P Michel	Budget Review	Completed	01/15/2021 8:47 PM
City Manager's Office	Nzeribe Ihekwaba	Assistant City Manager Review	Completed	01/18/2021 11:11 AM
City Manager's Office	Arthur Noriega V	City Manager Review	Completed	01/18/2021 1:00 PM
Legislative Division	Valentin J Alvarez	Legislative Division Review	Completed	01/20/2021 3:42 PM
Office of the City Attorney	Pablo Velez	ACA Review	Completed	02/24/2021 1:56 PM
Office of the City Attorney	Barnaby L. Min	Deputy City Attorney Review	Completed	02/24/2021 2:14 PM
Office of the City Attorney	Victoria Méndez	Approved Form and Correctness	Completed	02/24/2021 5:11 PM
City Commission	Nicole Ewan	Meeting	Completed	03/11/2021 9:00 AM

City Hall
3500 Pan American Drive
Miami, FL 33133
www.miamigov.com

Enactment Number: R-21-0096

File Number: 8453 **Final Action Date:3/11/2021**

A RESOLUTION OF THE MIAMI CITY COMMISSION ACCEPTING THE BID RECEIVED ON OCTOBER 9, 2020 PURSUANT TO INVITATION FOR BID NO. 1115382 FROM THE LOWEST RESPONSIVE AND RESPONSIBLE BIDDER, H&R PAVING, INC., A FLORIDA PROFIT CORPORATION, FOR THE PROVISION OF PAVEMENT RESURFACING AND ROADWAY REPAIR SERVICES, ON AN AS-NEEDED BASIS, FOR THE CITY OF MIAMI'S DEPARTMENT OF RESILIENCE AND PUBLIC WORKS FOR AN INITIAL TERM OF THREE (3) YEARS WITH THE OPTION TO RENEW FOR TWO (2) ADDITIONAL TWO (2) YEAR PERIODS; ALLOCATING FUNDS FROM ACCOUNT NO. 40-B73102E AND SUCH OTHER LEGALLY AVAILABLE FUNDING SOURCES, SUBJECT TO THE AVAILABILITY OF FUNDS AND BUDGETARY APPROVAL AT THE TIME OF NEED; AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE ANY AND ALL OTHER DOCUMENTS, INCLUDING ANY AMENDMENTS, RENEWALS, AND EXTENSIONS, SUBJECT TO ALL ALLOCATIONS, APPROPRIATIONS, PRIOR BUDGETARY APPROVALS, COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF THE CODE OF THE CITY OF MIAMI, FLORIDA, AS AMENDED ("CITY CODE"), INCLUDING THE CITY'S PROCUREMENT ORDINANCE, ANTI-DEFICIENCY ACT, AND FINANCIAL INTEGRITY PRINCIPLES, ALL AS SET FORTH IN CHAPTER 18 OF THE CITY CODE, IN FORMS ACCEPTABLE TO THE CITY ATTORNEY, AND IN COMPLIANCE WITH ALL APPLICABLE LAWS, RULES, AND REGULATIONS, AS MAY BE DEEMED NECESSARY FOR SAID PURPOSE.

WHEREAS, the City of Miami's ("City") Department of Resilience and Public Works ("RPW") has a continued need for pavement resurfacing and roadway repair services; and

WHEREAS, on September 11, 2020, pursuant to the City's Procurement Code, on behalf of RPW, the City's Department of Procurement ("Procurement") advertised and issued online Invitation for Bid ("IFB") No. 1115382 for the provision of pavement resurfacing and roadway repair services on an as needed basis; and

WHEREAS, on October 9, 2020, three (3) bids were received in response to this IFB, with the lowest responsive and responsible bid submitted by H&R Paving, Inc., a Florida profit corporation ("H&R Paving");

NOW, THEREFORE, BE IT RESOLVED BY THE COMMISSION OF THE CITY OF MIAMI, FLORIDA:

Section 1. The recitals and findings contained in the Preamble to this Resolution are adopted by reference and incorporated as if fully set forth in this Section.

Section 2. The bid received on October 9, 2020 pursuant to IFB No. 1115382 from the lowest responsive and responsible Bidder, H&R Paving, for the provision of pavement resurfacing and roadway repair services on an as-needed basis for RPW for an initial term of

three (3) years with the option to renew for two (2) additional two (2) year periods is hereby accepted.

Section 3. Funds shall be allocated from Account No. 40-B73102E and such other legally available funding sources, subject to the availability of funds and budgetary approval at the time of need.

Section 4. The City Manager is authorized[1] to negotiate and execute any and all other documents, including any amendments, renewals, and extensions, subject to all allocations, appropriations, prior budgetary approvals, compliance with all applicable provisions of the Code of the City of Miami, Florida, as amended ("City Code"), including the City's Procurement Ordinance, Anti-Deficiency Act, and Financial Integrity Principles, all as set forth in Chapter 18 of the City Code, in forms acceptable to the City Attorney, and in compliance with all applicable laws, rules, and regulations, as may be deemed necessary for said purpose.

Section 5. This Resolution shall become effective immediately upon its adoption.

APPROVED AS TO FORM AND CORRECTNESS:



Victoria Mendez, City Attorney 2/24/2021

[1] The herein authorization is further subject to compliance with all legal requirements that may be imposed, including but not limited to those prescribed by applicable City Charter and City Code provisions.

City of Miami

CONTRACT AWARD

Procurement Department

IFB NO:	1115382(28)
DESCRIPTION:	PAVEMENT RESURFACING AND ROADWAY REPAIR SERVICES
CONTRACT:	THREE (3) YEARS, W/ OTR FOR TWO (2) ADDITIONAL TWO (2) YEAR PERIOD
CONTRACT PERIOD:	**MARCH 22, 2021 THROUGH MARCH 21, 2024**
COMMODITY CODE:	98852-00

SECTION #1 – VENDOR AWARD

H&R Paving, Inc.
1955 NW 110th Ave
Miami, FL 33172
Contact: Raul Gonzalez
Ph: 305-261-3005
Fax: 305-592-6079
Email: abe@hrpaving.com

SECTION #2 – AWARD/BACKGROUND INFORMATION/APPLICABLE ORDINANCES/NOTES

CC AWARD DATE: MARCH 11, 2021
RESOLUTION NO: **21-0096**

AMENDED AMOUNT: N/A
INSURANCE REQUIREMENTS: YES
PERFORMANCE BOND: YES
APPLICABLE ORDINANCES: N/A

Notes: CONTRACT PERIOD: MARCH 22, 2021 THROUGH MARCH 21, 2024

SECTION #3 - REQUESTING DEPARTMENT

CITY OF MIAM, DEPARTMENT OF RESILIENCE AND PUBLIC WORKS
Buyer: Melinda Jeudi
Phone: (305) 416-1784

SECTION #4 - PROCURING AGENCY

CITY OF MIAM, DEPARTMENT OF PROCUREMENT
Buyer: Tahlia Gray
Phone: (305) 416-1912
Email: tgray@miamigov.com

Prepared By: Aimee Gandarilla, 3/22/2021

A CONTRACT AWARD SHEET INSTRUCTIONAL GUIDE TO ASSIST YOU WITH THE INFORMATION CONTAINED HEREIN IS AVAILABLE IN THE ISUPPLIER INFORMATION SECTION OF OUR WEBPAGE AT:
www.miamigov.com/procurement

City of Miami

CONTRACT AWARD

Procurement Department

AMENDMENT NO. 1

IFB NO:	1115382(28)
DESCRIPTION:	PAVEMENT RESURFACING AND ROADWAY REPAIR SERVICES
CONTRACT:	THREE (3) YEARS, W/ OTR FOR TWO (2) ADDITIONAL TWO (2) YEAR PERIOD
CONTRACT PERIOD:	**MARCH 22, 2021 THROUGH MARCH 21, 2024**
COMMODITY CODE:	98852-00

SECTION #1 – VENDOR AWARD

H&R Paving, Inc.
1955 NW 110th Ave
Miami, FL 33172
Contact: Raul Gonzalez
Ph: 305-261-3005
Fax: 305-592-6079
Email: abe@hrpaving.com

SECTION #2 – AWARD/BACKGROUND INFORMATION/APPLICABLE ORDINANCES/NOTES

CC AWARD DATE: MARCH 11, 2021
RESOLUTION NO: **21-0096**

AMENDED AMOUNT: N/A
INSURANCE REQUIREMENTS: YES
PERFORMANCE BOND: YES
APPLICABLE ORDINANCES: N/A

Notes: Pursuant to Section 2.31, Additions /Deletions of Services/Items/Suppliers, the addition of Solid Marking Tape to the contract. Here is the pricing:

Line Item	Item Description	Unit	Quantity	Unit Cost
83	**SOLID MARKING TAPE:** Includes all labor, material and equipment to install a 12" white solid stripe marking on concrete surface.	LF	1	$ 26.25
84	**NEW SHIELD SIGNS:** furnishing and installation of Shield performed thermoplastic 6'x15', 125 MIL signs	EA	1	$2,404.50

SECTION #3 - REQUESTING DEPARTMENT

CITY OF MIAM, DEPARTMENT OF RESILIENCE AND PUBLIC WORKS
Buyer: Melinda Jeudi
Phone: (305) 416-1784

SECTION #4 - PROCURING AGENCY

CITY OF MIAM, DEPARTMENT OF PROCUREMENT
Buyer: Tahlia Gray
Phone: (305) 416-1912
Email: tgray@miamigov.com

Prepared By: Aimee Gandarilla, 11/1/2021

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AGENDA ITEM CHEAT SHEET

1. TITLE: IFB 1115382 - PAVEMENT RESURFACING SERVICES

2. TYPE OF CONTRACT (Emergency ratification, SS, Piggyback, IFB, RFP, etc.):

Invitation fo Bid ("IFB")

3. TOTAL FISCAL IMPACT IN THE AGGREGATE: *$200,181.50 annually for Group 1 - Non-Federally F

4. SOURCE OF FUNDING: Parks and Recreation Department ("Parks") and Human Services Department

5. CONTRACT SAVINGS ACHIEVED/REVENUE: N/A

6. SCOPE OF SERVICES:

This nature of this item is to provide pavement resurfacing and roadway repair services.

7. WHAT IS THE TERM OF THE CONTRACT? (Please include OTR's)

The term of this contract is for an initial three (3) years with two (2), two (2) year options to renew.

8. WHAT IS THE METHOD OF AWARD (Group, Item by Item etc.)?

Award of this contract is made to lowest bidder on a group by group basis with a Primary and Secondary basis.

9. IF CITYWIDE, WHAT ARE THE MOST FREQUENT USER DEPARTMENTS?

Resilience and Public Works

10. NAME OF AWARDEE(S):

H&R Paving, Inc.

11. IS THE AWARDEE THE INCUMBENT?

Yes

12. WHEN DOES THE CURRENT CONTRACT EXPIRE?

AUGUST 13, 2020; Contract on extensions

13. IS THE PRICING HIGHER, LOWER OR THE SAME AS THE CURRENT CONTRACT? DESCRIBE PRICE DIFFERENTIAL.

Approximately the same; federally funded projects are new to the contract - hence pricing.

14. WHAT WAS THE PREVIOUS SPEND ON THE CURRENT CONTRACT?

$3,765,440.94

15. HOW MANY BIDDERS/PROPOSERS? IF ONLY ONE BIDDER/PROPOSER, WHAT WERE THE RESULTS OF THE SURVEY?

Three (3) Bidders submitted bids.

16. OTHER INFORMATION (Did Local Preference affect the award; was any firm deemed non-responsive; if yes which one(s) and why; was there a BAFO, and any other pertinent information):

There were three (3) Bidders that submitted bids, two (2) were deemed non-responsive, one for not meeting the five (5) year minimum requirement, and the other for not submitting all the documentation stated in the minimum requirements.

*$200,181.50 annually for Group 1 - Non-Federally Funded Projects and $200,186.48 annually for Group 2 - Federally Funded Projects (approximately $1,401,270.50 for Group 1 and $1,401,305.36 for Group 2 for all seven (7) years.

AGENDA ITEM SUMMARY FORM

FILE ID: _____

Date: 10/26/2020 **Requesting Department:** RPW

Commission Meeting Date: 3/11/2021 **District Impacted:** ALL

Type: ☑ Resolution ☐ Ordinance ☐ Emergency Ordinance ☐ Discussion Item ☐ Other_____

Subject: Invitation for Bid ('IFB") No. 1115382 - Pavement Resurfacing Services

Purpose of Item:

The nature of this item is to authorize a resolution of the Miami City Commission, accepting the bid received on October 9, 2020 pursuant to IFB 1115382 from the lowest responsive and responsible bidder, H&R Paving, Inc. ("H&R Paving") for the provision of pavement resurfacing services, on and as-needed basis, for the Department of Resilience and Public Works (“Public Works”), on an as needed basis, for an initial term of three (3) years, with the option to renew for two (2) additional two (2) year periods, allocating funds from Public Works' Account No. 40-B73102E and other funding sources, subject to the availability of funds and budget approval at the time of need; authorizing the City Manager to negotiate and execute all other documents, including any amendments, renewals, and extensions, subject to allocations, appropriations and prior budgetary approvals, and in compliance with all applicable provisions of the Code of the City of Miami, Florida, as amended, ("City Code"), including, the City of Miami's Procurement Ordinance, Anti-Deficiency Act, and Financial Integrity Principles, all as set forth in Chapter 18 of the City Code, in a form acceptable to the City Attorney, and in compliance with all applicable laws, rules, and regulations, as may be deemed necessary for said purpose.

Background Information:

On September 11, 2020, the Department of Procurement (“Procurement”), on behalf of Public Works issued IFB No. 1115382, Pavement Resurfacing Services, on an as-needed basis, under full and open competition to obtain the services of an experienced and qualified Bidder for the purpose of providing pavement resurfacing and roadway repair services. On October 9, 2020, three (3) bids were received. Two (2) vendors were deemed non-responsive, Procurement is recommending award to H&R Paving, which met all requirements, per the bid specifications, and is the apparent and responsive and responsible bidder. The estimated contract amount is approximately $200,176.35 annually for Group 1 - Non-Federally Funded Projects; and $200,181.33 annually for Group 2 - Federally Funded Projects (approximately $1,401,234.45 for Group 1 and $1,401,269.31 for Group 2 for all seven (7) years.

Budget Impact Analysis

Does the proposed purchase, legislation, project, or agreement involve a matter for which the Department/Office is requesting payments to occur beyond one (1) year? Please check one: Yes☐ No ☑ If yes, please describe in writing below the lease, debt, loan, or other financial obligation structure being requested in order to fund/finance your proposed purchase, legislation, project, or agreement:_____

☐ **Yes** ☑ **No** **Is this item related to revenue?**
☑ **Yes** ☐ **No** **Is this item an expenditure? If so, please identify funding source below.**

General Account No.: 40-B73102E
Special Revenue Account No.:
OCI Project No.:

☐ **Yes** ☑ **No** **Is this Item funded by bonds?**

Start Up Capital Cost:
Maintenance Cost:
Total Fiscal Impact: $200,176.35 annually Group 1; $200,181.33 annually Group 2; See background notes.

Does the item require approval from the following departments?

☐ **Grants**
☐ **Procurement**
☐ **Risk**

Final Approvals
(SIGN AND DATE)

Dept. Director_____

**all other approvals will be done through Accela*

..Title

A RESOLUTION OF THE MIAMI CITY COMMISSION, ACCEPTING THE BID RECEIVED ON OCTOBER 9, 2020 PURSUANT TO INVITATION FOR BID (“IFB”) 1115382 FROM THE LOWEST RESPONSIVE AND RESPONSIBLE BIDDER, H&R PAVING, INC. ("H&R PAVING") FOR THE PROVISION OF PAVEMENT RESURFACING SERVICES, ON AN AS-NEEDED BASIS, FOR THE DEPARTMENT OF RESILIENCE AND PUBLIC WORKS (“RPW”), FOR AN INITIAL CONTRACT TERM OF THREE (3) YEARS, WITH THE OPTION TO RENEW FOR TWO (2) ADDITIONAL TWO (2) YEAR PERIODS, ALLOCATING FUNDS FROM ACCOUNT NO. 40-B73102E AND OTHER FUNDING SOURCES, SUBJECT TO THE AVAILABILITY OF FUNDS AND BUDGET APPROVAL AT THE TIME OF NEED; AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE ALL OTHER DOCUMENTS, INCLUDING ANY AMENDMENTS, RENEWALS, AND EXTENSIONS, SUBJECT TO ALLOCATIONS, APPROPRIATIONS AND PRIOR BUDGETARY APPROVALS, AND IN COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF THE CODE OF THE CITY OF MIAMI, FLORIDA, AS AMENDED, ("CITY CODE"), INCLUDING, THE CITY OF MIAMI'S PROCUREMENT ORDINANCE, ANTI-DEFICIENCY ACT, AND FINANCIAL INTEGRITY PRINCIPLES, ALL AS SET FORTH IN CHAPTER 18 OF THE CITY CODE, IN A FORM ACCEPTABLE TO THE CITY ATTORNEY, AND IN COMPLIANCE WITH ALL APPLICABLE LAWS, RULES, AND REGULATIONS, AS MAY BE DEEMED NECESSARY FOR SAID PURPOSE.

..Body

BE IT RESOLVED BY THE COMMISSION OF THE CITY OF MIAMI, FLORIDA:

WHEREAS, RPW has a continued need for pavement resurfacing and roadway repair services, on an as needed basis.; and

WHEREAS, on September 11, 2020, the Department of Procurement (“Procurement”) on behalf of RPW, issued IFB No. 1185386, for the provision of pavement resurfacing and roadway repair services, on an as-needed basis. As required by the Procurement Code, the IFB was advertised and issued on-line.

NOW, THEREFORE, BE IT RESOLVED BY THE COMMISSION OF THE CITY OF MIAMI, FLORIDA:

Section 1. The recitals and findings contained in the Preamble to this Resolution are adopted by reference and incorporated as if fully set forth in this Section.

Section 2. The bid received October 9, 2020 pursuant to IFB 1115382 from, the lowest responsive and responsible Bidder, H&R Paving, for the provision of pavement resurfacing and roadway repair services on an as-needed basis for an initial contract term of three (3) years, with the option to renew for two (2) additional two (2) year periods. allocating funds from RPW’s’ Account No. 0001.208000.534000.0000.00000 and other funding sources, subject to the availability of funds and budget approval at the time of need, is accepted.

Section 3. he City Manager{1} is authorized to negotiate and execute all other documents, including any amendments, renewals, and extensions, subject to allocations, appropriations and prior budgetary approvals, and in compliance with all applicable provisions of the City Code, as amended, including, the City of Miami's Procurement Ordinance, Anti-Deficiency Act, and Financial Integrity Principles, all as set forth in Chapter 18 of the City Code, in a form acceptable to the City Attorney, and in compliance with all applicable laws, rules, and regulations, as may be deemed necessary for said purpose.

Section 4. This Resolution shall become effective immediately upon its adoption and signature of the Mayor. {2}

APPROVED AS TO FORM AND CORRECTNESS:

_____
VICTORIA MÉNDEZ
CITY ATTORNEY

..Footnotes

{1} The herein authorization is further subject to compliance with all requirements that may be imposed by the City Attorney, including but not limited to those prescribed by applicable City Charter and Code provisions.

{2} This Resolution shall become effective as specified herein unless vetoed by the Mayor within ten (10) days from the date it was passed and adopted. If the Mayor vetoes this Resolution, it shall become effective immediately upon override of the veto by the City Commission or upon the effective date stated herein, whichever is later.

PROPOSAL

1955 NW 110 Ave., Miami, FL 33172
Telephone: (305) 261-3005
Fax: (305) 592-6079

H&R PAVING INC.

LICENSED AND INSURED

QUOTE NO.	
DATE:	12/07/2023

City of Miami Contract #: 1115382

TO	CITY OF OPA LOCKA 780 Fisherman St OPA-LOCKA, FL 33054
CONTACT	Carlos Gonzalez

TO	New Sidewalk Construction Phase 5
CONTACT	FAX:

We hereby propose to furnish all labor, material, equipment and insurance, **SUBJECT TO ALL TERMS AND CONDITIONS AS SET FORTH ON BOTH SIDES OF THIS PROPOSAL, AS FOLLOWS:**

Item No.	Description	Qty	Unit	Unit Price	Value
4	Mobilization	1	LS	$ 1,500.00	$ 1,500.00
11	Barricades	2,000	ED	$ 0.50	$ 1,000.00
14	Work Zone Signs	50	ED	$ 100.00	$ 5,000.00
20	Asphalt Removal 0-2"	117	SY	$ 25.00	$ 2,925.00
23	Concrete Removal 0-6"	4,142	SF	$ 2.79	$ 11,556.18
25	Excavation - Base Prep. For New Sidewalk	527	CY	$ 30.00	$ 15,810.00
39	Adjust Manhole	5	EA	$ 500.00	$ 2,500.00
40	Adjust Valve	15	EA	$ 300.00	$ 4,500.00
45	Concrete Curb, Non-Reinforced	475	LF	$ 25.00	$ 11,875.00
52	Install New 6" Thick Sidewalk	11,130	SF	$ 6.60	$ 73,458.00
53	Install New 4" Thick Sidewalk	25,980	SF	$ 4.40	$ 114,312.00
54	Detectable Warning	280	SF	$ 50.00	$ 14,000.00
	TOTALS				**$ 258,436.18**

We hereby propose to furnish labor and materials - complete in accordance with the above specifications, for the sum shown above, with payment to be made as follows:

NOTE: Cost of permits to be billed additionally. Subgrade preparation if required under equipment rental basis. This proposal subject to acceptance within 30 days and is void thereafter at the option of **H & R PAVING, Inc.** (READ RESERVE SIDE)

Authorized Signature: _____

ACCEPTANCE OF PROPOSAL

The above prices, specifications and conditions are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.1/3 upon acceptance, when rock base is in place, balance upon completion. INTEREST will be charged on all delinquent accounts at the highest legal rate of interest allowable under the laws of the state of Florida.

ACCEPTED: _____ Signature: _____

Date: _____ Signature: _____

New Sidewalk Construction
Phase 5 - 2023



Street	From	To	Street Side
Bagdad Ave	Jann Ave	Sharar Ave	north
Bagdad Ave	Jann Ave	Sharar Ave	south
Dunad Ave	Ali Baba Ave	Fisherman St	east
Dunad Ave	Ali Baba Ave	Fisherman St	west
Fisherman St	NW 37th Ave	Sesame Ave	south
Fisherman St	NW 37th Ave	Sharazad Blvd	north
Golf Course Blvd	NW 37th Ave	Jann Ave	north
Jann Ave	Bagdad Ave	Perviz Ave	south
Jann Ave	Bagdad Ave	Perviz Ave	north
Kasim St	Kalandar St	NW 27th Ave	north
Kasim St	Kalandar St	NW 27th Ave	north
NW 23rd Ave	NW 139th St	NW 140th Ter	east
NW 26th Ave	Superior St	NW 139th St	west
Perviz Ave	Ali Baba Ave	Fisherman St	west
Sesame Ave	Ali Baba Ave	Fisherman St	west



New Sidewalk Construction

Phase 5 - 2024

Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A PUBLIC TRANSPORTATION GRANT AGREEMENT WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION, ATTACHED HERETO AS EXHIBIT "A"; AUTHORIZING CITY FUNDING TO SUPPORT A 50% GRANT MATCHING REQUIREMENT FOR AN AMOUNT UP TO THREE HUNDRED, FORTY-NINE THOUSAND FOUR HUNDRED SEVENTY-SIX DOLLARS ($349,476.00) TO SERVICE A SOUTHERN ROUTE SHUTTLE BUS FOR RESIDENTS OF THE CITY AND ADJACENT AREAS; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City of Opa-Locka ("City") applied for and has received a Florida Department of Transportation (FDOT) grant requiring a 50% match amount with available funding up to Three Hundred, Forty-Nine Thousand Four Hundred Seventy-Six Dollars ($349,476.00), which is effective from the contract execution date through June 30, 2025; and

WHEREAS, the FDOT grant is based on a cost amount of $698,952, with the FDOT grant funding up to 50% of this amount; and

WHEREAS, the purpose of the match grant is to fund a Southern Route Bus Shuttle for the provision of service to residents of the City, and adjacent areas as described in the Agreement attached hereto as Exhibit "A"; and

WHEREAS, the City of Opa-Locka will be responsible for securing a third party vendor for service delivery for a route complementary to the existing MDT Metrobus Service; and

WHEREAS, the City currently has one community bus route operated by Limousines of South Florida, covering a route between the Opa-Locka Tri Rail Station on Ali Baba and Walgreens on NW 27th Avenue; and

WHEREAS, the FY 2024 adopted budget People's Transportation Plan funded $700,000 for two bus routes, including using a grant with a 50% match requirement for the new southern route and $800,000 to be used as part of the funding of a Cairo Lane project. The annual funding received each year from the CITT for this fund requires from 20% to 100% to be used for buses or other forms of transit, and the remainder, if any, to be used for roadway improvements; and

WHEREAS, as a financial consideration, City staff has determined that the $700,000 allocated for the two bus routes will fund the northern route for the full year, however, the southern route would be funded for only a portion of FY 2024. If in FY 25, a full year of operation for the southern route is more expensive than currently estimated, a portion of CITT funding that would be otherwise used for roadway improvement would be reallocated in assist in funding the southern route; and

WHEREAS, the City Commission finds it to be in the best interests of the City and its residents to enter into a public funding grant agreement with the Florida Department of Transportation and authorize City funding to support a 50% match requirement for an amount up to Three Hundred Forty-Nine Thousand, Four Hundred Seventy-Six Dollars ($349,476.00) to service a southern route shuttle bus for residents of the city and adjacent areas.

NOW THEREFORE, BE IT RESOLVED THAT THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. Adoptions of Representations. The foregoing "Whereas" clauses are hereby ratified and confirmed as being true, and the same are hereby made a specific part of this Resolution.

Section 2. Authorizing Execution of Agreement. The City Commission of the City of Opa-Locka, Florida hereby authorizes the Interim City Manager to enter into a public funding grant agreement with the Florida Department of Transportation and authorize City funding to support a 50% match requirement for an amount up to Three Hundred Forty-Nine Thousand, Four Hundred Seventy-Six Dollars ($349,476.00) to service a southern route bus shuttle for residents of the city and adjacent areas.

Section 3. Effective Date. This Resolution shall take effect immediately upon adoption, and is subject to the approval of the Governor of the State of Florida or his designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____

Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-locka
Agenda Cover Memo

Department Manager:	Adelina Gross			**Department Manager Signature:**			
City Manager:	Darvin Williams			**CM Signature:**			
Commission Meeting Date:	January 10, 2024		**Item Type:** *(Enter X in the box)*	**Resolution**	**Ordinance**		**Other**
				X			
Fiscal Impact: *(Enter X in the box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in the box)*		**1st Reading**		**2nd Reading**
	X		**Public Hearing:** *(Enter X in the box)*		**Yes**	**No**	**Yes** / **No**
						X	**X**
Funding Source: *Account#:* **44-538638**	*(Enter Fund & Dept.)* CIP-Safe Neighborhood		**Advertising Requirement:** *(Enter X in the box)*		**Yes**		**No**
							X
Contract/P.O. Required: *(Enter X in the box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**		*N/A*		
	X						
Strategic Plan Related *(Enter X in the box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** (*list the specific objective/strategy this item will address)*		
	X		Enhance Organization ☐ Bus. & Economic Development ■ Public Safety ■ Quality of Education ☐ Qual. of Life & City Image ■ Communication ☐				
Sponsor Name:	**City Manager**		**Department:** **Capital Improvements Program**		*Department Submission Date:*		

Short Title:

Acceptance of Florida Department of Transportation for Opa-locka Community Bus Route (South Corridor)

Staff Summary:

Issue: The City has received a Florida Department of Transportation (FDOT) grant for up to $349,476 for one year of a second community bus route within the City which requires the City to match one-half of the annual cost of this program.

Background: The City currently has one community bus route, operated by Limousines of South Florida, which covers a route between the Opa-locka Tri Rail Station on Ali Baba and Walgreens on NW 27th Avenue. This program is funded through a County surtax for transportation programs, administered by the County Citizens' Independent Transportation Trust (CITT). This program fully funds the operation of this bus route, approximately $210,000, with the City incurring no expense other than staff time in addressing the administrative requirements of the program.

The City previously had a second southern route that connected the Tri Rail Station, Miami Dade College North Campus, and other public destinations within the City. This route had also been funded by grants but was terminated several years ago when these grants became no longer available.

Current Activity: The City applied for and has received a FDOT grant for up to $349,476 to reactivate the dormant southern route. This grant can be used to cover one-half of the cost of operating this route. The City is required to fund the other half of this program. CITT staff has indicated that the City won't receive additional CITT funding if the City chooses to operate a second bus route.

Financial Impact: The FY 24 Adopted Budget, People's Transportation Plan, funded $700,000 for two bus routes, including using a grant with a 50% match for the new southern route and $800,000 to be used as part of the funding of the Cairo Lane project. The annual funding received each year from the CITT for this fund requires from 20% to 100% be used for buses or other forms of transit and the remainder, if any, to be used for roadway improvement.

The $700,000 allocated for two bus routes will be sufficient for funding the northern route for the full year and for funding the southern route for the portion of FY 24 it would be operational. If in FY 25 a full year of operation for the southern route is more expensive than currently estimated, a portion of the CITT funding that would otherwise be used for roadway improvement will be reallocated to assist in funding the second route.

Proposed Action:

Staff recommends the City Commission authorize the Interim City Manager to accept the FDOT grant of up to $349.476 as a 50% match for a City southern bus route.

Attachment(s):

1. Agenda
2. FDOT Agreement
3. FDOT South Route Grant Application

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

PUBLIC TRANSPORTATION GRANT AGREEMENT

Form 725-000-01
STRATEGIC
DEVELOPMENT
OGC 4/25/2023

Financial Project Number(s): (item-segment-phase-sequence)		Fund(s):	DPTO	FLAIR Category:	088774
452157-1-84-01		Work Activity Code/Function:	215	Object Code:	751000
		Federal Number/Federal Award Identification Number (FAIN) – Transit only:	N/A	Org. Code:	55062020629
Contract Number:	G2M72	Federal Award Date:	N/A	Vendor Number:	F596000394002
CFDA Number:	N/A	Agency SAM/UEI Number:	N/A		
CFDA Title:	N/A				
CSFA Number:	55.012				
CSFA Title:	Public Transit Service Development Program				

THIS PUBLIC TRANSPORTATION GRANT AGREEMENT ("Agreement") is entered into _____, by and between the State of Florida, Department of Transportation, ("Department"), and City of Opa Locka, ("Agency"). The Department and the Agency are sometimes referred to in this Agreement as a "Party" and collectively as the "Parties."

NOW, THEREFORE, in consideration of the mutual benefits to be derived from joint participation on the Project, the Parties agree to the following:

1. **Authority.** The Agency, by Resolution or other form of official authorization, a copy of which is attached as **Exhibit "D", Agency Resolution** and made a part of this Agreement, has authorized its officers to execute this Agreement on its behalf. The Department has the authority pursuant to Section(s) 341.051, Florida Statutes, to enter into this Agreement.

2. **Purpose of Agreement.** The purpose of this Agreement is to provide for the Department's participation in City of Opa-Locka will provide South Route shuttle bus service to residents of the City and adjacent areas, as further described in **Exhibit "A", Project Description and Responsibilities**, attached and incorporated into this Agreement ("Project"), to provide Department financial assistance to the Agency, state the terms and conditions upon which Department funds will be provided, and to set forth the manner in which the Project will be undertaken and completed.

3. **Program Area.** For identification purposes only, this Agreement is implemented as part of the Department program area selected below (select all programs that apply):

   _ **Aviation**
   _ **Seaports**
   X **Transit**
   _ **Intermodal**
   _ **Rail Crossing Closure**
   _ **Match to Direct Federal Funding** (Aviation or Transit)
   (Note: Section 15 and Exhibit G do not apply to federally matched funding)
   _ **Other**

4. **Exhibits.** The following Exhibits are attached and incorporated into this Agreement:

   X Exhibit A: Project Description and Responsibilities
   X Exhibit B: Schedule of Financial Assistance
   _ *Exhibit B1: Deferred Reimbursement Financial Provisions
   _ *Exhibit B2: Advance Payment Financial Provisions
   _ *Exhibit B3: Alternative Advanced Pay (Transit Bus Program)
   _ *Exhibit C: Terms and Conditions of Construction
   X Exhibit D: Agency Resolution
   X Exhibit E: Program Specific Terms and Conditions
   X Exhibit F: Contract Payment Requirements
   X *Exhibit G: Audit Requirements for Awards of State Financial Assistance

__ *Exhibit H: Audit Requirements for Awards of Federal Financial Assistance
__ *Exhibit I: Certification of Disbursement of Payment to Vehicle and/or Equipment Vendor
__ *Additional Exhibit(s):

*Indicates that the Exhibit is only attached and incorporated if applicable box is selected.

5. **Time.** Unless specified otherwise, all references to "days" within this Agreement refer to calendar days.

6. **Term of Agreement.** This Agreement shall commence upon full execution by both Parties ("Effective Date") and continue through June 30, 2025. If the Agency does not complete the Project within this time period, this Agreement will expire unless an extension of the time period is requested by the Agency and granted in writing by the Department prior to the expiration of this Agreement. Expiration of this Agreement will be considered termination of the Project. The cost of any work performed prior to the Effective Date or after the expiration date of this Agreement will not be reimbursed by the Department.

   a. __ If this box is checked the following provision applies:

   Unless terminated earlier, work on the Project shall commence no later than the __ day of __, or within __ days of the issuance of the Notice to Proceed for the construction phase of the Project (if the Project involves construction), whichever date is earlier. The Department shall have the option to immediately terminate this Agreement should the Agency fail to meet the above-required dates.

7. **Amendments, Extensions, and Assignment.** This Agreement may be amended or extended upon mutual written agreement of the Parties. This Agreement shall not be renewed. This Agreement shall not be assigned, transferred, or otherwise encumbered by the Agency under any circumstances without the prior written consent of the Department.

8. **Termination or Suspension of Project.** The Department may, by written notice to the Agency, suspend any or all of the Department's obligations under this Agreement for the Agency's failure to comply with applicable law or the terms of this Agreement until such time as the event or condition resulting in such suspension has ceased or been corrected.

   a. Notwithstanding any other provision of this Agreement, if the Department intends to terminate the Agreement, the Department shall notify the Agency of such termination in writing at least thirty (30) days prior to the termination of the Agreement, with instructions to the effective date of termination or specify the stage of work at which the Agreement is to be terminated.

   b. The Parties to this Agreement may terminate this Agreement when its continuation would not produce beneficial results commensurate with the further expenditure of funds. In this event, the Parties shall agree upon the termination conditions.

   c. If the Agreement is terminated before performance is completed, the Agency shall be paid only for that work satisfactorily performed for which costs can be substantiated. Such payment, however, may not exceed the equivalent percentage of the Department's maximum financial assistance. If any portion of the Project is located on the Department's right-of-way, then all work in progress on the Department right-of-way will become the property of the Department and will be turned over promptly by the Agency.

   d. In the event the Agency fails to perform or honor the requirements and provisions of this Agreement, the Agency shall promptly refund in full to the Department within thirty (30) days of the termination of the Agreement any funds that were determined by the Department to have been expended in violation of the Agreement.

   e. The Department reserves the right to unilaterally cancel this Agreement for failure by the Agency to comply with the Public Records provisions of Chapter 119, Florida Statutes.

9. Project Cost:

a. The estimated total cost of the Project is $698,952. This amount is based upon **Exhibit "B", Schedule of Financial Assistance**. The timeline for deliverables and distribution of estimated amounts between deliverables within a grant phase, as outlined in **Exhibit "B", Schedule of Financial Assistance**, may be modified by mutual written agreement of the Parties and does not require execution of an **Amendment to the Public Transportation Grant Agreement**. The timeline for deliverables and distribution of estimated amounts between grant phases requires an amendment executed by both Parties in the same form as this Agreement.

b. The Department agrees to participate in the Project cost up to the maximum amount of $349,476 and, the Department's participation in the Project shall not exceed 50.00% of the total eligible cost of the Project, and as more fully described in **Exhibit "B", Schedule of Financial Assistance**. The Agency agrees to bear all expenses in excess of the amount of the Department's participation and any cost overruns or deficits involved.

10. Compensation and Payment:

a. Eligible Cost. The Department shall reimburse the Agency for allowable costs incurred as described in **Exhibit "A", Project Description and Responsibilities**, and as set forth in **Exhibit "B", Schedule of Financial Assistance**.

b. Deliverables. The Agency shall provide quantifiable, measurable, and verifiable units of deliverables. Each deliverable must specify the required minimum level of service to be performed and the criteria for evaluating successful completion. The Project and the quantifiable, measurable, and verifiable units of deliverables are described more fully in **Exhibit "A", Project Description and Responsibilities**. Modifications to the deliverables in **Exhibit "A", Project Description and Responsibilities** requires a formal written amendment.

c. Invoicing. Invoices shall be submitted no more often than monthly by the Agency in detail sufficient for a proper pre-audit and post-audit, based on the quantifiable, measurable, and verifiable deliverables as established in **Exhibit "A", Project Description and Responsibilities**. Deliverables and costs incurred must be received and approved by the Department prior to reimbursement. Requests for reimbursement by the Agency shall include an invoice, progress report, and supporting documentation for the deliverables being billed that are acceptable to the Department. The Agency shall use the format for the invoice and progress report that is approved by the Department.

d. Supporting Documentation. Supporting documentation must establish that the deliverables were received and accepted in writing by the Agency and must also establish that the required minimum standards or level of service to be performed based on the criteria for evaluating successful completion as specified in **Exhibit "A", Project Description and Responsibilities** has been met. All costs invoiced shall be supported by properly executed payrolls, time records, invoices, contracts, or vouchers evidencing in proper detail the nature and propriety of charges as described in **Exhibit "F", Contract Payment Requirements**.

e. Travel Expenses. The selected provision below is controlling regarding travel expenses:

X Travel expenses are NOT eligible for reimbursement under this Agreement.

_ Travel expenses ARE eligible for reimbursement under this Agreement. Bills for travel expenses specifically authorized in this Agreement shall be submitted on the Department's Contractor Travel Form No. 300-000-06 and will be paid in accordance with Section 112.061,

Florida Statutes, and the most current version of the Department's Disbursement Handbook for Employees and Managers.

f. **Financial Consequences.** Payment shall be made only after receipt and approval of deliverables and costs incurred unless advance payments are authorized by the Chief Financial Officer of the State of Florida under Chapters 215 and 216, Florida Statutes, or the Department's Comptroller under Section 334.044(29), Florida Statutes. If the Department determines that the performance of the Agency is unsatisfactory, the Department shall notify the Agency of the deficiency to be corrected, which correction shall be made within a time-frame to be specified by the Department. The Agency shall, within thirty (30) days after notice from the Department, provide the Department with a corrective action plan describing how the Agency will address all issues of contract non-performance, unacceptable performance, failure to meet the minimum performance levels, deliverable deficiencies, or contract non-compliance. If the corrective action plan is unacceptable to the Department, the Agency will not be reimbursed. If the deficiency is subsequently resolved, the Agency may bill the Department for the amount that was previously not reimbursed during the next billing period. If the Agency is unable to resolve the deficiency, the funds shall be forfeited at the end of the Agreement's term.

g. **Invoice Processing.** An Agency receiving financial assistance from the Department should be aware of the following time frames. Inspection or verification and approval of deliverables shall take no longer than 20 days from the Department's receipt of the invoice. The Department has 20 days to deliver a request for payment (voucher) to the Department of Financial Services. The 20 days are measured from the latter of the date the invoice is received or the deliverables are received, inspected or verified, and approved.

   If a payment is not available within 40 days, a separate interest penalty at a rate as established pursuant to Section 55.03(1), Florida Statutes, will be due and payable, in addition to the invoice amount, to the Agency. Interest penalties of less than one (1) dollar will not be enforced unless the Agency requests payment. Invoices that have to be returned to an Agency because of Agency preparation errors will result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the Department.

   A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for Agency who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516.

h. **Records Retention.** The Agency shall maintain an accounting system or separate accounts to ensure funds and projects are tracked separately. Records of costs incurred under the terms of this Agreement shall be maintained and made available upon request to the Department at all times during the period of this Agreement and for five years after final payment is made. Copies of these records shall be furnished to the Department upon request. Records of costs incurred include the Agency's general accounting records and the Project records, together with supporting documents and records, of the Contractor and all subcontractors performing work on the Project, and all other records of the Contractor and subcontractors considered necessary by the Department for a proper audit of costs.

i. **Progress Reports.** Upon request, the Agency agrees to provide progress reports to the Department in the standard format used by the Department and at intervals established by the Department. The Department will be entitled at all times to be advised, at its request, as to the status of the Project and of details thereof.

j. **Submission of Other Documents.** The Agency shall submit to the Department such data, reports, records, contracts, and other documents relating to the Project as the Department

may require as listed in **Exhibit "E", Program Specific Terms and Conditions** attached to and incorporated into this Agreement.

k. **Offsets for Claims.** If, after Project completion, any claim is made by the Department resulting from an audit or for work or services performed pursuant to this Agreement, the Department may offset such amount from payments due for work or services done under any agreement that it has with the Agency owing such amount if, upon written demand, payment of the amount is not made within 60 days to the Department. Offsetting any amount pursuant to this paragraph shall not be considered a breach of contract by the Department.

l. **Final Invoice.** The Agency must submit the final invoice on the Project to the Department within 120 days after the completion of the Project. Invoices submitted after the 120-day time period may not be paid.

m. **Department's Performance and Payment Contingent Upon Annual Appropriation by the Legislature.** The Department's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature. If the Department's funding for this Project is in multiple fiscal years, a notice of availability of funds from the Department's project manager must be received prior to costs being incurred by the Agency. See **Exhibit "B", Schedule of Financial Assistance** for funding levels by fiscal year. Project costs utilizing any fiscal year funds are not eligible for reimbursement if incurred prior to funds approval being received. The Department will notify the Agency, in writing, when funds are available.

n. **Limits on Contracts Exceeding $25,000 and Term more than 1 Year.** In the event this Agreement is in excess of $25,000 and has a term for a period of more than one year, the provisions of Section 339.135(6)(a), Florida Statutes, are hereby incorporated:

> "The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the comptroller of the Department that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding 1 year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Department which are for an amount in excess of $25,000 and which have a term for a period of more than 1 year."

o. **Agency Obligation to Refund Department.** Any Project funds made available by the Department pursuant to this Agreement that are determined by the Department to have been expended by the Agency in violation of this Agreement or any other applicable law or regulation shall be promptly refunded in full to the Department. Acceptance by the Department of any documentation or certifications, mandatory or otherwise permitted, that the Agency files shall not constitute a waiver of the Department's rights as the funding agency to verify all information at a later date by audit or investigation.

p. **Non-Eligible Costs.** In determining the amount of the payment, the Department will exclude all Project costs incurred by the Agency prior to the execution of this Agreement, costs incurred after the expiration of the Agreement, costs that are not provided for in **Exhibit "A", Project Description and Responsibilities**, and as set forth in **Exhibit "B", Schedule of Financial Assistance**, costs agreed to be borne by the Agency or its contractors and subcontractors for

not meeting the Project commencement and final invoice time lines, and costs attributable to goods or services received under a contract or other arrangement that has not been approved in writing by the Department. Specific unallowable costs may be listed in **Exhibit "A", Project Description and Responsibilities.**

11. **General Requirements.** The Agency shall complete the Project with all practical dispatch in a sound, economical, and efficient manner, and in accordance with the provisions in this Agreement and all applicable laws.

    a. **Necessary Permits Certification.** The Agency shall certify to the Department that the Agency's design consultant and/or construction contractor has secured the necessary permits.

    b. **Right-of-Way Certification.** If the Project involves construction, then the Agency shall provide to the Department certification and a copy of appropriate documentation substantiating that all required right-of-way necessary for the Project has been obtained. Certification is required prior to authorization for advertisement for or solicitation of bids for construction of the Project, even if no right-of-way is required.

    c. **Notification Requirements When Performing Construction on Department's Right-of-Way.** In the event the cost of the Project is greater than $250,000.00, and the Project involves construction on the Department's right-of-way, the Agency shall provide the Department with written notification of either its intent to:

        i. Require the construction work of the Project that is on the Department's right-of-way to be performed by a Department prequalified contractor, or

        ii. Construct the Project utilizing existing Agency employees, if the Agency can complete said Project within the time frame set forth in this Agreement.

    d. __ If this box is checked, then the Agency is permitted to utilize its own forces and the following provision applies: **Use of Agency Workforce.** In the event the Agency proceeds with any phase of the Project utilizing its own forces, the Agency will only be reimbursed for direct costs (this excludes general overhead).

    e. __ If this box is checked, then the Agency is permitted to utilize **Indirect Costs: Reimbursement for Indirect Program Expenses** (select one):

        i. __ Agency has selected to seek reimbursement from the Department for actual indirect expenses (no rate).

        ii. __ Agency has selected to apply a de minimus rate of 10% to modified total direct costs. Note: The de minimus rate is available only to entities that have never had a negotiated indirect cost rate. When selected, the de minimus rate must be used consistently for all federal awards until such time the agency chooses to negotiate a rate. A cost policy statement and de minimis certification form must be submitted to the Department for review and approval.

        iii. __ Agency has selected to apply a state or federally approved indirect cost rate. A federally approved rate agreement or indirect cost allocation plan (ICAP) must be submitted annually.

    f. **Agency Compliance with Laws, Rules, and Regulations, Guidelines, and Standards.** The Agency shall comply and require its contractors and subcontractors to comply with all terms and conditions of this Agreement and all federal, state, and local laws and regulations applicable to this Project.

g. **Claims and Requests for Additional Work.** The Agency shall have the sole responsibility for resolving claims and requests for additional work for the Project. The Agency will make best efforts to obtain the Department's input in its decisions. The Department is not obligated to reimburse for claims or requests for additional work.

12. Contracts of the Agency:

a. **Approval of Third Party Contracts.** The Department specifically reserves the right to review and approve any and all third party contracts with respect to the Project before the Agency executes or obligates itself in any manner requiring the disbursement of Department funds, including consultant and purchase of commodities contracts, or amendments thereto. If the Department chooses to review and approve third party contracts for this Project and the Agency fails to obtain such approval, that shall be sufficient cause for nonpayment by the Department. The Department specifically reserves unto itself the right to review the qualifications of any consultant or contractor and to approve or disapprove the employment of the same. If Federal Transit Administration (FTA) funds are used in the Project, the Department must exercise the right to third party contract review.

b. **Procurement of Commodities or Contractual Services.** It is understood and agreed by the Parties hereto that participation by the Department in a project with the Agency, where said project involves the purchase of commodities or contractual services where purchases or costs exceed the Threshold Amount for CATEGORY TWO per Section 287.017, Florida Statutes, is contingent on the Agency complying in full with the provisions of Section 287.057, Florida Statutes. The Agency's Authorized Official shall certify to the Department that the Agency's purchase of commodities or contractual services has been accomplished in compliance with Section 287.057, Florida Statutes. It shall be the sole responsibility of the Agency to ensure that any obligations made in accordance with this Section comply with the current threshold limits. Contracts, purchase orders, task orders, construction change orders, or any other agreement that would result in exceeding the current budget contained in **Exhibit "B", Schedule of Financial Assistance**, or that is not consistent with the Project description and scope of services contained in **Exhibit "A", Project Description and Responsibilities** must be approved by the Department prior to Agency execution. Failure to obtain such approval, and subsequent execution of an amendment to the Agreement if required, shall be sufficient cause for nonpayment by the Department, in accordance with this Agreement.

c. **Consultants' Competitive Negotiation Act.** It is understood and agreed by the Parties to this Agreement that participation by the Department in a project with the Agency, where said project involves a consultant contract for professional services, is contingent on the Agency's full compliance with provisions of Section 287.055, Florida Statutes, Consultants' Competitive Negotiation Act. In all cases, the Agency's Authorized Official shall certify to the Department that selection has been accomplished in compliance with the Consultants' Competitive Negotiation Act.

d. **Disadvantaged Business Enterprise (DBE) Policy and Obligation.** It is the policy of the Department that DBEs, as defined in 49 C.F.R. Part 26, as amended, shall have the opportunity to participate in the performance of contracts financed in whole or in part with Department funds under this Agreement. The DBE requirements of applicable federal and state laws and regulations apply to this Agreement. The Agency and its contractors agree to ensure that DBEs have the opportunity to participate in the performance of this Agreement. In this regard, all recipients and contractors shall take all necessary and reasonable steps in accordance with applicable federal and state laws and regulations to ensure that the DBEs have the opportunity to compete for and perform contracts. The Agency and its contractors and subcontractors shall not discriminate on the basis of race, color, national origin or sex in the award and performance of contracts, entered pursuant to this Agreement.

13. **Maintenance Obligations.** In the event the Project includes construction or the acquisition of commodities then the following provisions are incorporated into this Agreement:

    a. The Agency agrees to accept all future maintenance and other attendant costs occurring after completion of the Project for all improvements constructed or commodities acquired as part of the Project. The terms of this provision shall survive the termination of this Agreement.

14. **Sale, Transfer, or Disposal of Department-funded Property:**

    a. The Agency will not sell or otherwise transfer or dispose of any part of its title or other interests in real property, facilities, or equipment funded in any part by the Department under this Agreement without prior written approval by the Department.

    b. If a sale, transfer, or disposal by the Agency of all or a portion of Department-funded real property, facilities, or equipment is approved by the Department, the following provisions will apply:

        i. The Agency shall reimburse the Department a proportional amount of the proceeds of the sale of any Department-funded property.

        ii. The proportional amount shall be determined on the basis of the ratio of the Department funding of the development or acquisition of the property multiplied against the sale amount, and shall be remitted to the Department within ninety (90) days of closing of sale.

        iii. Sale of property developed or acquired with Department funds shall be at market value as determined by appraisal or public bidding process, and the contract and process for sale must be approved in advance by the Department.

        iv. If any portion of the proceeds from the sale to the Agency are non-cash considerations, reimbursement to the Department shall include a proportional amount based on the value of the non-cash considerations.

    c. The terms of provisions "a" and "b" above shall survive the termination of this Agreement.

        i. The terms shall remain in full force and effect throughout the useful life of facilities developed, equipment acquired, or Project items installed within a facility, but shall not exceed twenty (20) years from the effective date of this Agreement.

        ii. There shall be no limit on the duration of the terms with respect to real property acquired with Department funds.

15. **Single Audit.** The administration of Federal or State resources awarded through the Department to the Agency by this Agreement may be subject to audits and/or monitoring by the Department. The following requirements do not limit the authority of the Department to conduct or arrange for the conduct of additional audits or evaluations of Federal awards or State financial assistance or limit the authority of any state agency inspector general, the State of Florida Auditor General, or any other state official. The Agency shall comply with all audit and audit reporting requirements as specified below.

    Federal Funded:

    a. In addition to reviews of audits conducted in accordance with 2 CFR Part 200, Subpart F – Audit Requirements, monitoring procedures may include but not be limited to on-site visits by Department staff and/or other procedures, including reviewing any required performance and financial reports, following up, ensuring corrective action, and issuing management decisions on weaknesses found through audits when those findings pertain to Federal awards provided

through the Department by this Agreement. By entering into this Agreement, the Agency agrees to comply and cooperate fully with any monitoring procedures/processes deemed appropriate by the Department. The Agency further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Department, State of Florida Chief Financial Officer (CFO), or State of Florida Auditor General.

b. The Agency, a non-Federal entity as defined by 2 CFR Part 200, Subpart F – Audit Requirements, as a subrecipient of a Federal award awarded by the Department through this Agreement, is subject to the following requirements:

i. In the event the Agency expends a total amount of Federal awards equal to or in excess of the threshold established by 2 CFR Part 200, Subpart F – Audit Requirements, the Agency must have a Federal single or program-specific audit conducted for such fiscal year in accordance with the provisions of 2 CFR Part 200, Subpart F – Audit Requirements. **Exhibit "H", Audit Requirements for Awards of Federal Financial Assistance**, to this Agreement provides the required Federal award identification information needed by the Agency to further comply with the requirements of 2 CFR Part 200, Subpart F – Audit Requirements. In determining Federal awards expended in a fiscal year, the Agency must consider all sources of Federal awards based on when the activity related to the Federal award occurs, including the Federal award provided through the Department by this Agreement. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by 2 CFR Part 200, Subpart F – Audit Requirements. An audit conducted by the State of Florida Auditor General in accordance with the provisions of 2 CFR Part 200, Subpart F – Audit Requirements, will meet the requirements of this part.

ii. In connection with the audit requirements, the Agency shall fulfill the requirements relative to the auditee responsibilities as provided in 2 CFR Part 200, Subpart F – Audit Requirements.

iii. In the event the Agency expends less than the threshold established by 2 CFR Part 200, Subpart F – Audit Requirements, in Federal awards, the Agency is exempt from Federal audit requirements for that fiscal year. However, the Agency must provide a single audit exemption statement to the Department at FDOTSingleAudit@dot.state.fl.us no later than nine months after the end of the Agency's audit period for each applicable audit year. In the event the Agency expends less than the threshold established by 2 CFR Part 200, Subpart F – Audit Requirements, in Federal awards in a fiscal year and elects to have an audit conducted in accordance with the provisions of 2 CFR Part 200, Subpart F – Audit Requirements, the cost of the audit must be paid from non-Federal resources (*i.e.*, the cost of such an audit must be paid from the Agency's resources obtained from other than Federal entities).

iv. The Agency must electronically submit to the Federal Audit Clearinghouse (FAC) at https://harvester.census.gov/facweb/ the audit reporting package as required by 2 CFR Part 200, Subpart F – Audit Requirements, within the earlier of 30 calendar days after receipt of the auditor's report(s) or nine months after the end of the audit period. The FAC is the repository of record for audits required by 2 CFR Part 200, Subpart F – Audit Requirements. However, the Department requires a copy of the audit reporting package also be submitted to FDOTSingleAudit@dot.state.fl.us within the earlier of 30 calendar days after receipt of the auditor's report(s) or nine months after the end of the audit period as required by 2 CFR Part 200, Subpart F – Audit Requirements.

v. Within six months of acceptance of the audit report by the FAC, the Department will review the Agency's audit reporting package, including corrective action plans and

management letters, to the extent necessary to determine whether timely and appropriate action on all deficiencies has been taken pertaining to the Federal award provided through the Department by this Agreement. If the Agency fails to have an audit conducted in accordance with 2 CFR Part 200, Subpart F – Audit Requirements, the Department may impose additional conditions to remedy noncompliance. If the Department determines that noncompliance cannot be remedied by imposing additional conditions, the Department may take appropriate actions to enforce compliance, which actions may include but not be limited to the following:

1. Temporarily withhold cash payments pending correction of the deficiency by the Agency or more severe enforcement action by the Department;
2. Disallow (deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance;
3. Wholly or partly suspend or terminate the Federal award;
4. Initiate suspension or debarment proceedings as authorized under 2 C.F.R. Part 180 and Federal awarding agency regulations (or in the case of the Department, recommend such a proceeding be initiated by the Federal awarding agency);
5. Withhold further Federal awards for the Project or program;
6. Take other remedies that may be legally available.

vi. As a condition of receiving this Federal award, the Agency shall permit the Department or its designee, the CFO, or State of Florida Auditor General access to the Agency's records, including financial statements, the independent auditor's working papers, and project records as necessary. Records related to unresolved audit findings, appeals, or litigation shall be retained until the action is complete or the dispute is resolved.

vii. The Department's contact information for requirements under this part is as follows:

Office of Comptroller, MS 24
605 Suwannee Street
Tallahassee, Florida 32399-0450
FDOTSingleAudit@dot.state.fl.us

State Funded:

a. In addition to reviews of audits conducted in accordance with Section 215.97, Florida Statutes, monitoring procedures to monitor the Agency's use of state financial assistance may include but not be limited to on-site visits by Department staff and/or other procedures, including reviewing any required performance and financial reports, following up, ensuring corrective action, and issuing management decisions on weaknesses found through audits when those findings pertain to state financial assistance awarded through the Department by this Agreement. By entering into this Agreement, the Agency agrees to comply and cooperate fully with any monitoring procedures/processes deemed appropriate by the Department. The Agency further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Department, the Department of Financial Services (DFS), or State of Florida Auditor General.

b. The Agency, a "nonstate entity" as defined by Section 215.97, Florida Statutes, as a recipient of state financial assistance awarded by the Department through this Agreement, is subject to the following requirements:

i. In the event the Agency meets the audit threshold requirements established by Section 215.97, Florida Statutes, the Agency must have a State single or project-specific audit conducted for such fiscal year in accordance with Section 215.97, Florida Statutes; applicable rules of the Department of Financial Services; and

Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. **Exhibit "G", Audit Requirements for Awards of State Financial Assistance,** to this Agreement indicates state financial assistance awarded through the Department by this Agreement needed by the Agency to further comply with the requirements of Section 215.97, Florida Statutes. In determining the state financial assistance expended in a fiscal year, the Agency shall consider all sources of state financial assistance, including state financial assistance received from the Department by this Agreement, other state agencies, and other nonstate entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a nonstate entity for Federal program matching requirements.

ii. In connection with the audit requirements, the Agency shall ensure that the audit complies with the requirements of Section 215.97(8), Florida Statutes. This includes submission of a financial reporting package as defined by Section 215.97(2)(e), Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.

iii. In the event the Agency does not meet the audit threshold requirements established by Section 215.97, Florida Statutes, the Agency is exempt for such fiscal year from the state single audit requirements of Section 215.97, Florida Statutes. However, the Agency must provide a single audit exemption statement to the Department at FDOTSingleAudit@dot.state.fl.us no later than nine months after the end of the Agency's audit period for each applicable audit year. In the event the Agency does not meet the audit threshold requirements established by Section 215.97, Florida Statutes, in a fiscal year and elects to have an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, the cost of the audit must be paid from the Agency's resources (*i.e.*, the cost of such an audit must be paid from the Agency's resources obtained from other than State entities).

iv. In accordance with Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, copies of financial reporting packages required by this Agreement shall be submitted to:

Florida Department of Transportation
Office of Comptroller, MS 24
605 Suwannee Street
Tallahassee, Florida 32399-0405
FDOTSingleAudit@dot.state.fl.us

And

State of Florida Auditor General
Local Government Audits/342
111 West Madison Street, Room 401
Tallahassee, FL 32399-1450
Email: flaudgen_localgovt@aud.state.fl.us

v. Any copies of financial reporting packages, reports, or other information required to be submitted to the Department shall be submitted timely in accordance with Section 215.97, Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.

vi. The Agency, when submitting financial reporting packages to the Department for audits done in accordance with Chapters 10.550 (local governmental entities) or

10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, should indicate the date the reporting package was delivered to the Agency in correspondence accompanying the reporting package.

vii. Upon receipt, and within six months, the Department will review the Agency's financial reporting package, including corrective action plans and management letters, to the extent necessary to determine whether timely and appropriate corrective action on all deficiencies has been taken pertaining to the state financial assistance provided through the Department by this Agreement. If the Agency fails to have an audit conducted consistent with Section 215.97, Florida Statutes, the Department may take appropriate corrective action to enforce compliance.

viii. As a condition of receiving state financial assistance, the Agency shall permit the Department or its designee, DFS, or the Auditor General access to the Agency's records, including financial statements, the independent auditor's working papers, and project records as necessary. Records related to unresolved audit findings, appeals, or litigation shall be retained until the action is complete or the dispute is resolved.

c. The Agency shall retain sufficient records demonstrating its compliance with the terms of this Agreement for a period of five years from the date the audit report is issued and shall allow the Department or its designee, DFS, or State of Florida Auditor General access to such records upon request. The Agency shall ensure that the audit working papers are made available to the Department or its designee, DFS, or State of Florida Auditor General upon request for a period of five years from the date the audit report is issued, unless extended in writing by the Department.

16. **Notices and Approvals.** Notices and approvals referenced in this Agreement must be obtained in writing from the Parties' respective Administrators or their designees.

17. **Restrictions, Prohibitions, Controls and Labor Provisions:**

a. **Convicted Vendor List.** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity; may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

b. **Discriminatory Vendor List.** In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the Discriminatory Vendor List, kept by the Florida Department of Management Services, may not submit a bid on a contract to provide goods or services to a public entity; may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.

c. **Non-Responsible Contractors.** An entity or affiliate who has had its Certificate of Qualification suspended, revoked, denied, or have further been determined by the Department to be a non-responsible contractor, may not submit a bid or perform work for the construction or repair of a public building or public work on a contract with the Agency.

d. **Prohibition on Using Funds for Lobbying.** No funds received pursuant to this Agreement may be expended for lobbying the Florida Legislature, judicial branch, or any state agency, in accordance with Section 216.347, Florida Statutes.

e. **Unauthorized Aliens.** The Department shall consider the employment by any contractor of unauthorized aliens a violation of Section 274A(e) of the Immigration and Nationality Act. If the contractor knowingly employs unauthorized aliens, such violation will be cause for unilateral cancellation of this Agreement.

f. **Procurement of Construction Services.** If the Project is procured pursuant to Chapter 255, Florida Statutes, for construction services and at the time of the competitive solicitation for the Project, 50 percent or more of the cost of the Project is to be paid from state-appropriated funds, then the Agency must comply with the requirements of Section 255.0991, Florida Statutes.

g. **E-Verify.** The Agency shall:

   i. Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Agency during the term of the contract; and

   ii. Expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

h. **Executive Order 20-44.** Pursuant to Governor's Executive Order 20-44, if the Agency is required by the Internal Revenue Code to file IRS Form 990 and is named in statute with which the Department must form a sole-source, public-private agreement; or through contract or other agreement with the State, annually receives 50% or more of its budget from the State or from a combination of State and Federal funds, Recipient shall submit an Annual Report to the Department, including the most recent IRS Form 990, detailing the total compensation for each member of the Agency executive leadership team. Total compensation shall include salary, bonuses, cashed-in leave, cash equivalents, severance pay, retirement benefits, deferred compensation, real-property gifts, and any other payout. The Agency shall inform the Department of any changes in total executive compensation during the period between the filing of Annual Reports within 60 days of any change taking effect. All compensation reports shall detail the percentage of executive leadership compensation received directly from all State and/or Federal allocations to the Agency. Annual Reports shall be in the form approved by the Department and shall be submitted to the Department at fdotsingleaudit@dot.state.fl.us within 180 days following the end of each tax year of the Agency receiving Department funding.

i. **Design Services and Construction Engineering and Inspection Services.** If the Project is wholly or partially funded by the Department and administered by a local governmental entity, except for a seaport listed in Section 311.09, Florida Statutes, or an airport as defined in Section 332.004, Florida Statutes, the entity performing design and construction engineering and inspection services may not be the same entity.

18. Indemnification and Insurance:

a. It is specifically agreed between the Parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof, a third party beneficiary under this Agreement, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement. The Agency guarantees the payment of all just claims for materials, supplies, tools, or labor and other just claims against the Agency or any

subcontractor, in connection with this Agreement. Additionally, the Agency shall indemnify, defend, and hold harmless the State of Florida, Department of Transportation, including the Department's officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Agency and persons employed or utilized by the Agency in the performance of this Agreement. This indemnification shall survive the termination of this Agreement. Additionally, the Agency agrees to include the following indemnification in all contracts with contractors/subcontractors and consultants/subconsultants who perform work in connection with this Agreement:

"To the fullest extent permitted by law, the Agency's contractor/consultant shall indemnify, defend, and hold harmless the Agency and the State of Florida, Department of Transportation, including the Department's officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of the contractor/consultant and persons employed or utilized by the contractor/consultant in the performance of this Agreement.

This indemnification shall survive the termination of this Agreement."

b. The Agency shall provide Workers' Compensation Insurance in accordance with Florida's Workers' Compensation law for all employees. If subletting any of the work, ensure that the subcontractor(s) and subconsultant(s) have Workers' Compensation Insurance for their employees in accordance with Florida's Workers' Compensation law. If using "leased employees" or employees obtained through professional employer organizations ("PEO's"), ensure that such employees are covered by Workers' Compensation Insurance through the PEO's or other leasing entities. Ensure that any equipment rental agreements that include operators or other personnel who are employees of independent contractors, sole proprietorships, or partners are covered by insurance required under Florida's Workers' Compensation law.

c. If the Agency elects to self-perform the Project, then the Agency may self-insure. If the Agency elects to hire a contractor or consultant to perform the Project, then the Agency shall carry, or cause its contractor or consultant to carry, Commercial General Liability insurance providing continuous coverage for all work or operations performed under this Agreement. Such insurance shall be no more restrictive than that provided by the latest occurrence form edition of the standard Commercial General Liability Coverage Form (ISO Form CG 00 01) as filed for use in the State of Florida. The Agency shall cause, or cause its contractor or consultant to cause, the Department to be made an Additional Insured as to such insurance. Such coverage shall be on an "occurrence" basis and shall include Products/Completed Operations coverage. The coverage afforded to the Department as an Additional Insured shall be primary as to any other available insurance and shall not be more restrictive than the coverage afforded to the Named Insured. The limits of coverage shall not be less than $1,000,000 for each occurrence and not less than a $5,000,000 annual general aggregate, inclusive of amounts provided by an umbrella or excess policy. The limits of coverage described herein shall apply fully to the work or operations performed under the Agreement, and may not be shared with or diminished by claims unrelated to the Agreement. The policy/ies and coverage described herein may be subject to a deductible and such deductibles shall be paid by the Named Insured. No policy/ies or coverage described herein may contain or be subject to a Retention or a Self-Insured Retention unless the Agency is a state agency or subdivision of the State of Florida that elects to self-perform the Project. Prior to the execution of the Agreement, and at all renewal periods which occur prior to final acceptance of the work, the Department shall be provided with an ACORD Certificate of Liability Insurance reflecting the coverage described herein. The Department shall be notified in writing within ten days of any cancellation, notice of cancellation, lapse, renewal, or proposed change to any policy or coverage described herein. The Department's approval or failure to disapprove any policy/ies,

coverage, or ACORD Certificates shall not relieve or excuse any obligation to procure and maintain the insurance required herein, nor serve as a waiver of any rights or defenses the Department may have.

d. When the Agreement includes the construction of a railroad grade crossing, railroad overpass or underpass structure, or any other work or operations within the limits of the railroad right-of-way, including any encroachments thereon from work or operations in the vicinity of the railroad right-of-way, the Agency shall, or cause its contractor to, in addition to the insurance coverage required above, procure and maintain Railroad Protective Liability Coverage (ISO Form CG 00 35) where the railroad is the Named Insured and where the limits are not less than $2,000,000 combined single limit for bodily injury and/or property damage per occurrence, and with an annual aggregate limit of not less than $6,000,000. The railroad shall also be added along with the Department as an Additional Insured on the policy/ies procured pursuant to the paragraph above. Prior to the execution of the Agreement, and at all renewal periods which occur prior to final acceptance of the work, both the Department and the railroad shall be provided with an ACORD Certificate of Liability Insurance reflecting the coverage described herein. The insurance described herein shall be maintained through final acceptance of the work. Both the Department and the railroad shall be notified in writing within ten days of any cancellation, notice of cancellation, renewal, or proposed change to any policy or coverage described herein. The Department's approval or failure to disapprove any policy/ies, coverage, or ACORD Certificates shall not relieve or excuse any obligation to procure and maintain the insurance required herein, nor serve as a waiver of any rights the Department may have.

e. When the Agreement involves work on or in the vicinity of utility-owned property or facilities, the utility shall be added along with the Department as an Additional Insured on the Commercial General Liability policy/ies procured above.

19. Miscellaneous:

a. **Environmental Regulations.** The Agency will be solely responsible for compliance with all applicable environmental regulations and for any liability arising from non-compliance with these regulations, and will reimburse the Department for any loss incurred in connection therewith.

b. **Non-Admission of Liability.** In no event shall the making by the Department of any payment to the Agency constitute or be construed as a waiver by the Department of any breach of covenant or any default which may then exist on the part of the Agency and the making of such payment by the Department, while any such breach or default shall exist, shall in no way impair or prejudice any right or remedy available to the Department with respect to such breach or default.

c. **Severability.** If any provision of this Agreement is held invalid, the remainder of this Agreement shall not be affected. In such an instance, the remainder would then continue to conform to the terms and requirements of applicable law.

d. **Agency not an agent of Department.** The Agency and the Department agree that the Agency, its employees, contractors, subcontractors, consultants, and subconsultants are not agents of the Department as a result of this Agreement.

e. **Bonus or Commission.** By execution of the Agreement, the Agency represents that it has not paid and, also agrees not to pay, any bonus or commission for the purpose of obtaining an approval of its application for the financing hereunder.

f. **Non-Contravention of State Law.** Nothing in the Agreement shall require the Agency to observe or enforce compliance with any provision or perform any act or do any other thing in

contravention of any applicable state law. If any of the provisions of the Agreement violate any applicable state law, the Agency will at once notify the Department in writing so that appropriate changes and modifications may be made by the Department and the Agency to the end that the Agency may proceed as soon as possible with the Project.

g. **Execution of Agreement.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute the same Agreement. A facsimile or electronic transmission of this Agreement with a signature on behalf of a party will be legal and binding on such party.

h. **Federal Award Identification Number (FAIN).** If the FAIN is not available prior to execution of the Agreement, the Department may unilaterally add the FAIN to the Agreement without approval of the Agency and without an amendment to the Agreement. If this occurs, an updated Agreement that includes the FAIN will be provided to the Agency and uploaded to the Department of Financial Services' Florida Accountability Contract Tracking System (FACTS).

i. **Inspector General Cooperation.** The Agency agrees to comply with Section 20.055(5), Florida Statutes, and to incorporate in all subcontracts the obligation to comply with Section 20.055(5), Florida Statutes.

j. **Law, Forum, and Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. In the event of a conflict between any portion of the contract and Florida law, the laws of Florida shall prevail. The Agency agrees to waive forum and venue and that the Department shall determine the forum and venue in which any dispute under this Agreement is decided.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year written above.

AGENCY City of Opa Locka

By: _____

Name: DARVIN WILLIAMS

Title: CITY MANAGER

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

By: _____

Name: _____

Title: D6-Director of Transportation Development

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION
Legal Review:

_____

To: Simon.Huang@dot.state.fl.us

FLORIDA DEPARTMENT OF TRANSPORTATION
FUNDS APPROVAL

G2M72

8/3/2023

CONTRACT INFORMATION

Contract:	G2M72
Contract Type:	GD - GRANT DISBURSEMENT (GRANT)
Method of Procurement:	G - GOVERMENTAL AGENCY (287.057,F.S.)
Vendor Name:	OPA LOCKA, CITY OF
Vendor ID:	F596000394002
Beginning Date of This Agreement:	08/02/2023
Ending Date of This Agreement:	~~12/31/2024~~ 06/30/2025
Contract Total/Budgetary Ceiling:	ct = $349,476.00
Description:	SFY24- SERVICE DEVELOPEMENT GRANT FOR CITY OF OPA-LOCKA

FUNDS APPROVAL INFORMATION

FUNDS APPROVED/REVIEWED FOR ROBIN M. NAITOVE, CPA, COMPTROLLER ON 8/3/2023

Action:	Original
Reviewed or Approved:	APPROVED
Organization Code:	55062020629
Expansion Option:	A1
Object Code:	751000
Amount:	$349,476.00
Financial Project:	45215718401
Work Activity (FCT):	215
CFDA:	
Fiscal Year:	2024
Budget Entity:	55100100
Category/Category Year:	088774/24
Amendment ID:	O001
Sequence:	00
User Assigned ID:	
Enc Line (6s)/Status:	0001/04

Total Amount: $349,476.00

EXHIBIT A

Project Description and Responsibilities

A. Project Description (description of Agency's project to provide context, description of project components funded via this Agreement (if not the entire project)): The City of Opa-Locka will provide shuttle bus service, via a third-party vendor, to residents of the city and adjacent area for the South Route.

This route is complementary to the existing MDT Metrobus service.

B. Project Location (limits, city, county, map): City of Opa Locka/Opa-Locka, FL/Miami-Dade

C. Project Scope (allowable costs: describe project components, improvement type/service type, approximate timeline, project schedule, project size): "Service Development Projects specifically include projects involving the use of new technologies, services, routes, or vehicle frequencies; the purchase of special transportation services, and other such techniques for increasing service to the riding public as are applicable to specific localities and transit user groups. Projects involving the application of new technologies or methods for improving operations, maintenance, and marketing in public transit systems can be funded through the Service Development program. Eligible capital costs are any costs that would be defined as capital costs by the Federal Transit Administration. Examples would include, but not be limited to: the acquisition of buses for fleet and service expansions; transfer facilities; intermodal terminals and park and ride facilities; and passenger amenities, such as passenger shelters and bus stop signs. Eligible net operating costs are all operating costs of a project; less any federal funds, fares, or other sources of income to the project."

D. Deliverable(s): The City of Opa-Locka will provide shuttle bus service, via a third-party vendor, to residents of the city and adjacent area for the South Route.

The project scope identifies the ultimate project deliverables. Deliverables for requisition, payment and invoice purposes will be the incremental progress made toward completion of project scope elements. Supporting documentation will be quantifiable, measurable, and verifiable, to allow for a determination of the amount of incremental progress that has been made, and provide evidence that the payment requested is commensurate with the accomplished incremental progress and costs incurred by the Agency.

E. Unallowable Costs (including but not limited to): N/A

F. Transit Operating Grant Requirements (Transit Only):

Transit Operating Grants billed as an operational subsidy will require an expenditure detail report from the Agency that matches the invoice period. The expenditure detail, along with the progress report, will be the required deliverables for Transit Operating Grants. Operating grants may be issued for a term not to exceed three years from execution. The original grant agreement will include funding for year one. Funding for years two and three will be added by amendment as long as the grantee has submitted all invoices on schedule and the project deliverables for the year have been met.

EXHIBIT B

Schedule of Financial Assistance
TRANSIT OPERATING ONLY

FUNDS AWARDED TO THE AGENCY PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

A. Fund Type and Fiscal Year:

Financial Project Number	Fund Type	FLAIR Category	State Fiscal Year	Object Code	CSFA/ CFDA Number	CSFA/CFDA Title or Funding Source Description	Funding Amount
452157-1-84-01	DPTO	088774	2024	751000	55.012	Public Transit Service Development Program	$349,476.00
		Total Financial Assistance					$349,476.00

B. Operations Phase - Estimate of Project Costs by Budget Category:

Budget Categories *Operations (Transit Only)* *	State	Local	Federal	Total
Salaries	$0	$0	$0	$0
Fringe Benefits	$0	$0	$0	$0
Contractual Services	$349,476	$349,476	$0	$698,952
Travel	$0	$0	$0	$0
Other Direct Costs	$0	$0	$0	$0
Indirect Costs	$0	$0	$0	$0
Totals	***$349,476***	***$349,476***	***$0***	***$698,952***

* Budget category amounts are estimates and can be shifted between items without amendment (because they are all within the Operations Phase).

C. Cost Reimbursement

The Agency will submit invoices for cost reimbursement on a:

___ Monthly
_X_ Quarterly
___ Other:

basis upon the approval of the deliverables including the expenditure detail provided by the Agency.

Scope Code and/or Activity Line Item (ALI) (Transit Only)	30.09.01

BUDGET/COST ANALYSIS CERTIFICATION AS REQUIRED BY SECTION 216.3475, FLORIDA STATUTES:

I certify that the cost for each line item budget category has been evaluated and determined to be allowable, reasonable, and necessary as required by Section 216.3475, Florida Statutes. Documentation is on file evidencing the methodology used and the conclusions reached.

Simon Huang
Department Grant Manager Name

Signature Date

EXHIBIT D

AGENCY RESOLUTION

PLEASE SEE ATTACHED

EXHIBIT E
PROGRAM SPECIFIC TERMS AND CONDITIONS – TRANSIT

(Service Development)

1. **Conformance with Enabling Legislation.** This Agreement is in conformance with Section 341.051, F.S.

2. **Bus Transit System.** In accordance with Section 341.061, F.S., and Rule Chapter 14-90, Florida Administrative Code, the Agency shall submit and the Department shall have on file, an annual safety certification that the Agency has adopted and is complying with its adopted System Safety Program Plan pursuant to Rule Chapter 14-90, F.A.C., and has performed annual safety inspections of all buses operated.

3. **Transit Vehicle Inventory Management.** The agency will follow the Department's Transit Vehicle Inventory Management Procedure (725-030-025), which outlines the requirements for continuing management control, inventory transfer and disposal actions. This procedure pertains ONLY to capital procurements of rolling stock using the FTA Section 5310, Section 5311, Section 5316, and Section 5317 programs as the funding source, or where the Department participates in 50% or more of the public transit vehicle's purchase price. This may include vehicles purchased under the State Transit Block Grant Program, State Transit Corridor Program, State Transit Service Development Program, or other applicable Department programs.

4. **Progress Reports.** The Agency will submit Semi-Annual Progress Reports on monthly ridership data. Reports are due no later than January 30th for the period ending December 31st and July 30th for the period ending June 30th.

5. **Project Goals and Service Data.** The Agency must report on work efforts and provide a detailed, side-by-side comparison of the project goals and actual service data.

6. **Submittal of Proposed Timeline.** The Agency will submit a Proposed Time Line for Service Development Activities prior to the commencement of the project.

7. **Final Report.** At any time when it becomes necessary to terminate the project or at the end of the two years, a Final Report will be submitted by the Agency. This report will accompany the Final Invoice for reimbursement. The Final Report will include the following:

   a) An evaluation of the attainment of the goals and objectives.

   b) The reasons any of the goals were not met.

   c) The benefit accrued by the Agency.

   d) A statement of the Agency's intent to continue with the service demonstrated.

-- End of Exhibit E --

EXHIBIT F

Contract Payment Requirements
Florida Department of Financial Services, Reference Guide for State Expenditures
Cost Reimbursement Contracts

Invoices for cost reimbursement contracts must be supported by an itemized listing of expenditures by category (salary, travel, expenses, etc.). Supporting documentation shall be submitted for each amount for which reimbursement is being claimed indicating that the item has been paid. Documentation for each amount for which reimbursement is being claimed must indicate that the item has been paid. Check numbers may be provided in lieu of copies of actual checks. Each piece of documentation should clearly reflect the dates of service. Only expenditures for categories in the approved agreement budget may be reimbursed. These expenditures must be allowable (pursuant to law) and directly related to the services being provided.

Listed below are types and examples of supporting documentation for cost reimbursement agreements:

(1) Salaries: A payroll register or similar documentation should be submitted. The payroll register should show gross salary charges, fringe benefits, other deductions and net pay. If an individual for whom reimbursement is being claimed is paid by the hour, a document reflecting the hours worked times the rate of pay will be acceptable.

(2) Fringe Benefits: Fringe Benefits should be supported by invoices showing the amount paid on behalf of the employee (e.g., insurance premiums paid). If the contract specifically states that fringe benefits will be based on a specified percentage rather than the actual cost of fringe benefits, then the calculation for the fringe benefits amount must be shown.

Exception: Governmental entities are not required to provide check numbers or copies of checks for fringe benefits.

(3) Travel: Reimbursement for travel must be in accordance with Section 112.061, Florida Statutes, which includes submission of the claim on the approved State travel voucher or electronic means.

(4) Other direct costs: Reimbursement will be made based on paid invoices/receipts. If nonexpendable property is purchased using State funds, the contract should include a provision for the transfer of the property to the State when services are terminated. Documentation must be provided to show compliance with Department of Management Services Rule 60A-1.017, Florida Administrative Code, regarding the requirements for contracts which include services and that provide for the contractor to purchase tangible personal property as defined in Section 273.02, Florida Statutes, for subsequent transfer to the State.

(5) In-house charges: Charges which may be of an internal nature (e.g., postage, copies, etc.) may be reimbursed on a usage log which shows the units times the rate being charged. The rates must be reasonable.

(6) Indirect costs: If the contract specifies that indirect costs will be paid based on a specified rate, then the calculation should be shown.

Contracts between state agencies, and/or contracts between universities may submit alternative documentation to substantiate the reimbursement request that may be in the form of FLAIR reports or other detailed reports.

The Florida Department of Financial Services, online Reference Guide for State Expenditures can be found at this web address https://www.myfloridacfo.com/Division/AA/Manuals/documents/ReferenceGuideforStateExpenditures.pdf.

EXHIBIT G

AUDIT REQUIREMENTS FOR AWARDS OF STATE FINANCIAL ASSISTANCE

THE STATE RESOURCES AWARDED PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

SUBJECT TO SECTION 215.97, FLORIDA STATUTES:~

Awarding Agency: Florida Department of Transportation
State Project Title: Public Transit Service Development Program
CSFA Number: 55.012
***Award Amount:** $349,476

*The award amount may change with amendments

Specific project information for CSFA Number 55.012 is provided at: https://apps.fldfs.com/fsaa/searchCatalog.aspx

COMPLIANCE REQUIREMENTS APPLICABLE TO STATE RESOURCES AWARDED PURSUANT TO THIS AGREEMENT:

State Project Compliance Requirements for CSFA Number 55.012 are provided at: https://apps.fldfs.com/fsaa/searchCompliance.aspx

The State Projects Compliance Supplement is provided at: https://apps.fldfs.com/fsaa/compliance.aspx

Sponsored By: Interim City Manager

RESOLUTION NO. 24-

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, ACCEPTING THE PROPOSAL OF SAFA CONSTRUCTION, LLC FOR THE SESAME STREET CULVERT REPLACEMENT WITHIN THE CITY, PURSUANT TO RFP NO. 23-1016200 AND FURTHER AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO AN AGREEMENT WITH SAFA CONSTRUCTION, LLC FOR SAID SERVICES, IN AN AMOUNT NOT TO EXCEED ONE MILLION, TWO HUNDRED THOUSAND DOLLARS ($1,200,000.00) AND IN THE FORM ATTACHED HERETO AS EXHIBIT "A"; FURTHER AUTHORIZING A PROJECT CONTINGENCY BUDGET, IN A TOTAL AMOUNT NOT TO EXCEED TWENTY-FIVE THOUSAND DOLLARS ($25,000.00); PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on September 18, 2023, the City of Opa-Locka ("City") published Request for Proposals (RFP) No. 23-1016200 to obtain services for the Sesame Street Culvert Replacement, within the City; and

WHEREAS, one (1) sealed proposal was received by the City Clerk's Office and certified by the City Clerk on October 16, 2023; and

WHEREAS, Safa Construction, LLC has proposed One Million, Two Hundred Thousand Dollars ($1,200,000.00) for the project and the City Commission desires to accept the proposal and further enter into an agreement with Safa Construction, LLC in the contract form attached as Exhibit "A"; and

WHEREAS, the Interim City Manager recommends the establishment of a twenty-five thousand dollars ($25,000.00) continency budget for unexpected minor issues which may arise. Any additional amount shall be approved by the City Commission as an amendment to the contract agreement; and

WHEREAS, the City Commission finds that acceptance of Safa Construction, LLC proposal for Sesame Street Culvert Replacement is in the best interests of the City of Opa-Locka and its residents.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

SECTION 2. The City Commission of the City of Opa-Locka, Florida hereby accepts the proposal of Safa Construction, LLC relating to Request for Proposals (RFP) 23-1016200, for the Sesame Street Culvert Replacement within the City, and hereby authorizes the Interim City Manager, or other authorized person, to enter into the agreement, attached hereto as Exhibit "A", in an amount not to exceed One Million, Two Hundred Thousand Dollars ($1,200,000.00); further authorizing a project contingency budget, in a total amount not to exceed Twenty-Five Thousand Dollars ($25,000.00).

SECTION 3. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

SECTION 4. This Resolution shall take effect upon adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass _____
Commissioner Kelley _____
Commissioner Williams _____
Vice Mayor Ervin _____
Mayor Taylor _____

City of Opa-locka
Agenda Cover Memo

Department Director:	Adelina Gross		**Department Director Signature:**	DocuSigned by: C48C07C1E8DE492...		
City Manager:	Darvin Williams		**CM Signature:**			
Commission Meeting Date:	*01.10.2024*	**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**	
			X			
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**	**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*	**Yes** / **No**	**Yes** / **No**	
					X	X
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*	**Yes**	**No**	
					X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**			
	X					
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*		
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐			
Sponsor Name	City Manager		**Department:**	City Manager		

Short Title:

A resolution authorizing the Interim City Manager to accept the proposal of Safa Construction, LLC. for the Sesame Street Culvert Replacement pursuant to RFP No. 23-1016200 and further authorizing the Interim City Manager to enter into an agreement with Safa Construction, LLC for said services.

Staff Summary:

The City is seeking the replacement of the Sesame Street Culvert. On September 18, 2023, the City issued Request for Proposals (RFP) 23-1016200. The City Clerk certified one (1) proposal document on October 17, 2023, from Safa Construction, LLC. Safa Construction, LLC. is a leader in all functions of Heavy Civil

Construction. It encompasses Project Management, Contract Administration, Accounting, Planning, Design, Processing, Specs Review, Field Supervision, and Operations.

Financial Impact: The available budget for this project is $1,300,000. The winning bid is $1,200.000. Staff recommends the establishment of a $25,000 continency for unexpected minor issues which may arise. Any additional issues exceeding that amount would be returned to the City Commission for approval.

Account	Description	Available	Project	Remaining Balance
44-541840	Sesame Street Culvert	$1,300,000	$1,200,000	$100,000
	Contingency		$25,000	($25,000)
Total			$1,225,000	$75,000

Proposed Action:

Staff recommends the City Commission approve the recommendation for Safa Financial Consultants, LLC and authorize the Interim City Manager to enter into an agreement with said company for an amount of $1,200,000 for the Sesame Street Culvert and further authorize establishment of a $25,000 contingency for minor issues which may arise.

Attachment:

RFP No. 23-1016200
Bid Certification
Bid Proposal
Revised Bid Total Amount

SAFA CONSTRUCTION, LLC

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

November 8, 2023

Darvin William JD, MBA, MPH

Interim City Manager, City of Opa-Locka

780 Fisherman Street

Opa-Locka, FL 33054

Subject: Revised price proposal for Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave (RFP NO: 23-1016200)

Dear Darvin,

I hope this letter finds you in good health and high spirits. I am writing to formally submit a revised price proposal for the Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave (RFP NO: 23-1016200) bid, which was previously tendered to your office on September 17,2023. I appreciate the opportunity to participate in this bid, and after careful consideration and further evaluation, I believe that the revised proposal will better align with the needs and expectations of our esteemed city.

Upon a thorough review of the project requirements, as well as discussions with city officials (Microsoft Teams meeting-Tuesday, October 31, 2023, 9:30 AM-10:00 AM) and with my team, and careful analysis of our cost estimates, I have identified several areas where we can offer a more competitive and cost-effective proposal without compromising the quality or integrity of our work. Our commitment to delivering value to the city remains unwavering, and we believe that the revisions we have made will better reflect our dedication to your community.

To facilitate a clear understanding of the changes we have made, we have prepared a detailed item-by-item comparison between the original and revised price proposals. The following table illustrates the differences:

SAFA CONSTRUCTION, LLC

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

Comparison table :

Item No	Description	Original Proposal ($)	Revised Proposal ($)	Comments
1	Mobilization (LS)	20,000.00	20,000.00	No Change
2	Material Cost-Pipe	26,000.00	26,000.00	No Change
3	Labor & Equipment Cost-Pipe	104,000.00	104,000.00	No Change
4	Material Cost-Guardrail	7,500.00	7,500.00	No Change
5	Labor Cost-Guardrail	15,000.00	15,000.00	No Change
6	Labor & Equipment Cost-Demo	300,000.00	300,000.00	No Change
7	Labor & Equipment Cost-Excavation	100,500.00	100,500.00	No Change
8	By-pass(LS)	50,000.00	50,000.00	No Change
9	Labor & Material Cost-Turbidity	2,000.00	2,000.00	No Change
10	Labor & Material Cost-Drop inlet	10,000.00	10,000.00	No Change
11	Material Cost-Concrete	15,750.00	15,750.00	No Change
12	Labor Cost-Concrete	6,750.00	6,750.00	No Change
13	Labor & Material Cost-Side walk	2,025.00	2,025.00	No Change
14	Labor & Material Cost- Curb & Gutter	1,500.00	1,500.00	No Change
15	Labor & Material Cost-Backfill	50,000.00	50,000.00	No Change
16	Labor, Material & Equipment Cost-Rubble	336,000.00	300,000.00	See Note # 1
17	Labor, Material & Equipment Cost-Sand-Cement	12,500.00	12,500.00	No Change
18	Labor, Material & Equipment Cost-Endwall	22,500.00	22,500.00	No Change
19	Labor & Equipment Cost-Shoulder Barrier	13,000.00	13,000.00	No Change
20	Labor & Equipment Cost-Mill & Resurface	18,450.00	18,450.00	No Change
21	Labor, Material & Equipment Cost-Paving	9,225.00	9,225.00	No Change
22	Labor, Material & Equipment Cost-Pavement marking	1,200.00	1,200.00	No Change
23	Labor & Material Cost-Re-sod	4,000.00	4,000.00	No Change
24	MOT (LS)	5,000.00	5,000.00	No Change
25	Sheeting and shoring	21,000.00	21,000.00	No Change
26	Labor & Equipment Cost-Removing unsuitable material (LS)	67,000.00	46,100.00	See Note # 2
26-A	Bonding Cost	0.00	36,000.00	See Note # 1
27	**Subtotal**	**1,220,900.00**	**1,200,000.00**	
28	Police (LS)	24,000.00	0.00	See Note # 3
29	Permit fee	36,627.00	0.00	See Note # 4
30	Unforeseen	122,090.00	0.00	See Note # 5
Total-Bid		**1,403,617.00**	**1,200,000.00**	

SAFA CONSTRUCTION, LLC

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

Note for revisions in our proposal:

1) In the original bid, there was no separate line item for Bonding cost, so bonding cost was included in line item number 16, and in the revised price proposal bonding cost is shown separately in item number 26-A for clarification.
2) During the re-site visit to the construction site, we identified that unsuitable material in the canal would not be that much.
3) We feel that we do not police guard during construction. I have been working with the city past 10 years, I never felt that I needed a police guard to work in the city. So, the cost is deleted.
4) This is the city's project within its own city limit. So, the city can handle this issue internally as it was done for other projects.
5) Unforeseen conditions are unpredictable and non-measurable. The city can keep the cost for this line item internally as it was for other standard projects.

In this comparison table, we have outlined the specific items, their descriptions, the original pricing, the revised pricing, and the cost savings achieved in the revised proposal. We believe this breakdown provides transparency and demonstrates our commitment to offering the best value for the city.

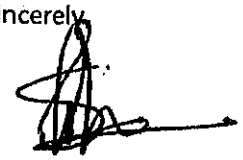
We are confident that the revised proposal reflects our dedication to delivering a competitive and cost-effective solution for the city. Our team remains fully committed to collaborating closely with your office to ensure the successful execution of this project, should our proposal be accepted.

If you have any questions or require further clarification regarding the itemized comparison or any other aspects of the proposal, please feel free to contact me directly at (954) 326-8295 or via email at md.rahman@safaconstruction.net . We are eager to engage in discussions and provide any additional information or documentation as needed.

We would like to express our sincere gratitude for your consideration of our proposal and for your dedication to selecting the best value for the city. We are enthusiastic about the opportunity to contribute to the continued growth and development of our community and look forward to the possibility of working closely with your office to realize this vision.

Thank you for your time and attention, and I eagerly await your response.

Sincerely,



MD Shahinur Rahman, CGC, PMP, MS, PE (CA, FL)

PRESIDENT /CEO

SAFA CONSTRUCTION, LLC

SBE | CBE

CITY OF OPA-LOCKA
CERTIFICATION OF PROPOSALS RECEIVED

REQUEST FOR PROPOSALS (RFP) NO. 23-1016200
SESAME STREET CULVERT REPLACEMENT

I, Joanna Flores, City Clerk of the City of Opa-locka, Florida, do hereby certify that sealed proposals were received by 2:00 p.m. on October 16, 2023, and opened at the Opa-locka Municipal Complex, 780 Fisherman Street, 4th Floor, Opa-locka, Florida at 3:00 p.m. this 17th day of October, 2023.

PROPOSALS RECEIVED

Name of Company	Total Base Bid
1. **Safa Construction Inc.** **11186 SW 17th MNR** **Davie, FL 33324** **Contact: MD Shahinur Rahman, President/CEO** **Tele: 954.326.8295** **Email: md.rahman@safaconstruction.net**	**$1,403,617.00**

Please note that the proposal submitted by Safa Construction Inc. was submitted via Demand Star (e-bid) and provided to the City Clerk's Office by Junior Bergel, City of Opa-locka Procurement Office.

I further certify that sealed proposal(s) were submitted and properly opened in my presence and the following:

Junior Bergel
Procurement Officer
City of Opa-locka

Joanna Flores, CMC
City Clerk
City of Opa-locka

City of Opa-locka

RFP NO: 23-1016200

REQUEST FOR PROPOSALS (RFP)

SESAME STREET CULVERT REPLACEMENT

CITY OF OPA-LOCKA
CULVERT REPLACEMENT ALONG SESAME STREET BETWEEN NW 135th STREET AND ATLANTIC AVE
SEPTEMBER 2023

UTILITY PROVIDERS

MIAMI DADE WATER & SEWER
MIAMI-MADE WATER & SEWER DEPARTMENT
3575 SOUTH LEJEUNE ROAD
MIAMI, FL 33146
CONTACT: MR. LAZARO GUERRA
PHONE: (786) 268-5213

POWER
FLORIDA POWER & LIGHT
10705 CAMA. ROOST DR.
MIAMI, FL 33182
CONTACT: EDGAR AGUILAR
PHONE: (305) 378-2634

TELEPHONE
AT&T/DISTRIBUTION
6625 LAKESIDE RD
WEST PALM BEACH, FL. 33411
CONTACT: DINO FARRUGGIO
PHONE: (561) 683-2729

STORM DRAINAGE PERMITING
MIAMI DADE COUNTY DEPARTMENT OF REGULATORY & ECONOMIC RESOURCES
701 NW 1ST COURT
MIAMI, FL 33168
PHONE: (305) 372-6760

GAS
FLORIDA CITY GAS
4045 NW 97TH AVE
DORAL, FL 33178
CONTACT: MR. GUSTAVO PEÑA
PHONE: (305) 883-3619

CABLE
VERIZON
3301 MATRIX DRIVE SUITE 100
RICHARDSON, TX 75082
CONTACT: TODD HARS
PHONE: (754) 236-5587

DESIGN TEAM

CIVIL ENGINEER
305 ENGINEERING GROUP
2222 PONCE DE LEON BLVD, SUITE 300
CORAL GABLES, FL 33134

SURVEYOR
SELLO & SELLO LAND SURVEYING CORP.
2290 SW 131ST AVE., SUITE 201
MIAMI, FL 33186

OWNER
CITY OF OPA-LOCKA
780 FISHERMAN STREET,
4TH FLOOR OPA-LOCKA, FL 33054

GEOTECHNICAL
UNIVERSAL ENGINEERING SCIENCES
1216 WALLACE DRIVE
DELRAY BEACH, FLORIDA 33444

PROJECT LOCATION



LOCATION PLAN
MIAMI-DADE COUNTY PORTION OF SW 1/4 OF
SEC. 21 - TWP. 52 - ROE 41 E.
N.T.S.

SHEET INDEX

G-01	TITLE SHEET, LOCATION AND LIST OF DRAWINGS
G-02	ABBREVIATION, SYMBOLS, GENERAL NOTES AND LEGEND
C-01	DEMOLITION AND EROSION CONTROL PLAN
C-02	DEMOLITION AND EROSION CONTROL NOTES AND DETAILS
C-03	PROPOSED SITE PLAN
C-04	PAVEMENT RESTORATION PLAN
C-05	PAVEMENT MARKINGS & SIGNAGE PLAN
C-06	MOT PLAN
C-07	MOT DETAILS
C-08	STANDARD DETAILS
C-09	STANDARD DETAILS
C-10	STANDARD DETAILS
C-11	STANDARD DETAILS
S-1	PIPE CULVERT STRUCTURAL DETAILS (1 OF 2)
S-2	PIPE CULVERT STRUCTURAL DETAILS (1 OF 2)

COMMUNITY OFFICIALS
VERONICA J. WILLIAMS, MAYOR

JOHN H. TAYLOR JR., VICE MAYOR
DR. SHERELEAN BASS, COMMISSIONER
CHRIS DAVIS, COMMISSIONER
AUDREY DOMINGUEZ, COMMISSIONER

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S.S.O.C.O.F. DESIGN TICKET No.342105404-000

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY REINALDO RIVERA, PE, ON 9/8/23.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

REINALDO J. RIVERA, LICENSE No. 83476, STATE OF FLORIDA, PROFESSIONAL ENGINEER

Reinaldo J. Rivera, P.E.
Civil Engineer
STATE OF FLORIDA - LICENSE NO. 83476
2222 PONCE DE LEON BLVD, SUITE 300
CORAL GABLES, FLORIDA 33134
(305) 753-2625

AURIA AUSTIN
PUBLIC WORKS & CIP DIRECTOR
CITY OF OPA-LOCKA PUBLIC WORKS DEPARTMENT
780 FISHERMAN STREET
OPA-LOCKA, FL 33054

305 ENGINEERING GROUP, L.L.C.
2222 PONCE DE LEON BLVD SUITE
300 CORAL GABLES, FL 33134
305.902.4402
www.305engineering.com

BID SET

AD	DS	RR	20-0276200
AE	9/8/23	1	15
OPA-LOCKA-G-01.DWG			G-01

GENERAL NOTES:

I. APPLICABLE CODES

A. GENERAL

1. EXISTING UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS HAS BEEN SHOWN BASED UPON THE DATA AVAILABLE TO DESIGNER. THE ENGINEER AND THE OWNER DO NOT GUARANTEE THE ACCURACY AND COMPLETENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MAKE ANY OTHER'S NECESSARY EXPLORATIONS TO ASCERTAIN EXACT LOCATIONS OF EXISTING STRUCTURES WORK SHALL BE DONE PRIOR TO EXCAVATION TO AVOID DAMAGE OF THE CONSTRUCTION SHALL HAVE ALL REASONABLE EFFORTS TO IDENTIFY LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, IF IT DOES DAMAGE CONTRACTOR WITH UTILITY COMPANIES AND CONSTRUCTION OR OTHER SUCH ACTIVITIES NOTIFICATION AND WHERE AND SHALL BEAR ALL COSTS FOR THE WORK.
2. ALL WORK SHALL BE INSPECTED BY AND APPROVED BY THE CONSTRUCTION ENGINEER PRIOR START OF WORK.
3. THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLANS, NOTES PREFACE TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND FDOT DESIGN STANDARDS LATEST EDITION.
4. ALL WORK WITHIN FDOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST STANDARDS, SERIES, REGULATIONS AND SPECIFICATIONS OF THE STATE, COUNTY, STATE, AND FEDERAL CODES AND ARE APPLICABLE.
5. SEE CONSTRUCTION PLANS BY REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, ORDINANCES AND REGULATIONS.
6. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS AND THE CONTRACT AGREEMENTS AND SPECIFICATIONS IN THE CONTRACTOR'S FAVOR. THE CONSTRUCTION SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION TO THE ENGINEER
7. ALL HANDICAP ACCESSIBLE ACCESS TO CONFORM WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND LOCAL, STATE, AND FEDERAL CODES. LATEST EDITIONS.
8. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL ARRANGE FOR AND PROCURE ALL PERMITS AND LICENSES AND ALL APPLICABLE CHARGES SHALL BE PAID FOR AS A FEES, AND SHALL ALL PURPOSES NECESSARY TO COMPLETE THE PROJECT.
9. SHOP DIMENSIONS AND ELEVATIONS ARE TO BE EDGE OF PAVEMENT AND FINISH GRADE UNLESS NOTED OTHERWISE.
10. IF UNFAMILIAR GAS, WATER, AND SEWER SERVICE LATERALS ARE ENCOUNTERED DURING EXCAVATION, THE SECTION IN WHICH CONNECTIONS ARE BE REPAIRED AND THE STUB FOR THE SEE CONNECTED TO THE MAIN AND BE CAPPED, PLUGGED OR OTHERWISE SECURED.
11. CONSTRUCTION SHALL MAINTAIN ACCESS TO ALL PROPERTIES AND RESIDENTIAL LOCATIONS BY NORMAL MEANS AND METHODS I.E. TEMPORARY STEEL PLATES, DIMENSIONS, ETC. ALL ASSOCIATED COST TO BE INCLUDED IN W.O.T
12. ITEMS BE CORRECT WITH ACTUAL CONDITIONS EXISTING CURBS AND GUTTERS, DRIVEWAYS, DRAINAGE STRUCTURES PAVEMENT AND BASE AND LIMITED EXCAVATIONS ARE TO BE PERFORMED BY CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE UNLESS THE ITEMS ARE TO BE REUSED ON THE PROJECT
13. EXCESS MATERIAL REMOVED BY THE CONTRACTOR WILL BE DISPOSED OF IN AREAS PROVIDED BY THE CONTRACTOR
14. THE INFORMATION PROVIDED IN SEVERAL PLANS ARE TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE LAND DISTURBANCE BUT MAY BE INCOMPLETE DURING THE COURSE OF THE CONSTRUCTION, ADDITIONAL EXCAVATIONS, OR SOIL BORINGS BEYOND THOSE INDICATED IN THE PLANS MAY BE NECESSARY DURING THE COURSE OF CONSTRUCTION. THE CONTRACTOR SHALL BE PREPARED TO PERFORM SUCH ADDITIONAL WORK AS MAY BE DEEMED NECESSARY BY THE ENGINEER AT THEIR OWN CONSIDERATION REGARDING THE ACTUAL CONDITIONS THAT MAY BE ENCOUNTERED AND UPON WHICH THEY WILL NOT BE BASED IT IS ALL THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE SITE CONDITIONS, INCLUDING BOTH THE SURFACE AND SUBSURFACE CONDITIONS AND BASE THEIR PRICING ACCORDINGLY. THE UNDERSIGNED, REPORT'S AVAILABILITY TO THE CONTRACTOR FOR REVIEW.
15. CONTRACTOR SHALL PROVIDE ALL SAFETY EQUIPMENT, SHORING, SHEETING OR OTHER PROTECTIVE SYSTEMS NECESSARY TO PROTECT WORKMEN, EMPLOYEES, STRUCTURES OR PROPERTY, DURING EXCAVATION OF TRENCH, MATERIAL OR CAVING, THE FAILURE OF ANY SUCH, OR FOR ANY AREA, OR FOR ANY REASON DURING CONSTRUCTION, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND PROCESS AT NO ADDITIONAL COST TO THE OWNER
17. ANY DIFFERENCES OR DISCREPANCIES OR QUESTIONS ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
18. THE AMOUNT OF EACH OF THE MATERIALS PROVIDED IS THE ESTIMATED AMOUNT REQUIRED TO COMPLETE THE JOB. THESE QUANTITIES ARE ESTIMATED ONLY AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETE ALL WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ADDITIONAL MATERIALS BE REQUIRED ONLY WHEN AUTHORIZED BY THE ENGINEER'S CHANGE ORDERS AS DETERMINED IN THE AGREEMENTS AND CONTRACT DOCUMENTS.
19. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES SHOWN HEREIN IN PLACE.
20. ALL HAND EXCAVATED AND GREEN CUT LINES PERFORMED NEEDED ON THE DRAWINGS.
21. SEE SPECIFICATIONS FOR ALL TRAFFIC CONTROL, SIGNAGE, BARRICADES, FLAGMEN, VEHICLES, ETC. WITH THE CONSTRUCTION OF THIS PROJECT AND ALL ASSOCIATED COSTS SHALL BE INCLUDED IN THE BID.
22. THE CONTRACTOR SHALL NOT ENCROACH ON ANY PRIVATE PROPERTY, NOR PERFORM, WORK ON ANY PROPERTY WITHOUT OBTAINING WRITTEN AUTHORIZATION FROM THE OWNER.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION ACCIDENTALLY OR PLANNED TO EXISTING OBJECTS, STRUCTURES, PRIVATE OR PUBLIC, WITHIN THE PROJECT LIMITS. THE COSTS TO REPLACE, REMOVE OR MODIFY IRRIGATION PIPES, SPRINKLER HEADS OR OTHER IRRIGATION EQUIPMENT SHALL BE CONSIDERED INCIDENTAL TO LAND SHALL BE INCLUDED IN THE PRICE BID FOR RELATED WORK. ALL COSTS DUE TO DAMAGE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL EXISTING IMPROVEMENTS WITHIN THE LIMITS OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, ALL EXISTING PAVEMENT, CURBS, DRIVES, PAVED AREAS, SIDEWALKS, ETC. WHETHER OR NOT SHOWN ON THE PLANS, DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER OR ANY SUBCONTRACTOR. CONSTRUCTION SHALL REPAINT ANY CURBING, TO SIDEWALK, DRIVEWAY, ETC. PRIOR TO DISCONNECTION OF ANY EXISTING IRRIGATION SYSTEM.
25. CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND UNDERSTANDING ALL SWPPP OR OTHER PERMITS AFFECTING CONSTRUCTION, REPAIR OR REPLACE ALL DISTURBED AREAS, INCLUDING, EMPLOYEES OR OTHER OF ANY SUBCONTRACTOR TO BE RESPONSIBLE FOR ANY ADDITIONAL COSTS INCURRED BY THE ENGINEER OF RECORD TO THAT EXTENT.
26. ALL NEW STRUCTURES, EXISTING MANHOLES, VALVE AND BOX COVERS, DRAINAGE GRATES, GUARDRAIL, CURBS, UTILITY VAULTS, BOXES, MONITORING WELLS, ETC. TO MATCH PROPOSED GRADES.
27. ALL INSTALLATIONS WHERE DRAINAGE GRATES ARE PROVIDED SHALL MEET THE REQUIREMENTS WITH THE MIAMI-DADE COUNTY PUBLIC WORKS CONSTRUCTION & ENGINEERING DIVISION MANUAL OF STANDARDS.
28. THE CITY OF OPA-LOCKA SHALL MAINTAIN A COPY OF ALL PERMITTED REQUIRED AS-BUILTS, AND SHOP DRAWINGS OF THE PROJECT

B. CONSTRUCTION SAFETY

1. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER SPECIFICALLY THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. C. PERSON, SAFETY OFF
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF FLORIDA TRENCH SAFETY ACT
4. WHERE EXCAVATING TO A DEPTH IN EXCESS OF FIVE FEET (5') ARE REQUIRED, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE SAFETY PLAN:
   2.1 A REFERENCE TO THE TRENCH SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION FOR THE PROJECT.
   2.2 THE NAME OF THE COMPETENT PERSON RESPONSIBLE FOR TRENCH SAFETY WITHIN THAT SHOW
   2.3 CONTRACTOR WILL COMPLY WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
   2.4 ENGINEER'S COST ESTIMATE FOR THE COST OF TRENCH SAFETY MEASURES EXCAVATION STANDARDS. THE COST OF EACH TRENCH SAFETY MEASURE SUITABLE FOR THE TRENCH OR EXCAVATION SHALL BE SUBMITTED. THE INFORMATION LISTED IN ITEM 2 TO THE ENGINEER PRIOR TO BEGINNING OF
5. SURVEY DATA
6. ALL ELEVATIONS ON THE PLANS, OR REFERENCED IN THE SPECIFICATIONS, ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929.
7. ALL EXISTING CONTROL POINTS AND/OR REFERENCE MARKERS SHALL BE RAISED TO FINAL GRADE. THESE POINTS AND REFERENCE MARKERS SHALL OF LOCATED AND NOTED ON THE AS-BUILTS.
8. THE LOCATION OF EXISTING ABOVE AND BELOW GROUND UTILITIES, STRUCTURES, SHELL AND OTHER OBSTRUCTIONS ABOVE GROUND FEATURES SHOWN ON THE PLANS WERE TAKEN FROM THE UNLESS PLANS OR PREPARED BY:
   BELLO & BELLO LAND SURVEYING
   12705 SW 132 AVENUE, SUITE 202
   MIAMI, FLORIDA 33186
   (305)-251-5227
   CONTACT: DONATO BELLO, PSM

II. PRECONSTRUCTION RESPONSIBILITIES

A. GENERAL

1. UPON RECEIPT OF THE NOTICE TO PROCEED, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY COMPANIES, AND THE CONSTRUCTION ENGINEER OF RECORD. THE CONTRACTOR SHALL ATTEND THE CONFERENCE AFTER ISSUANCE OF THE CONTRACTOR "NOTICE TO PROCEED" BUT BEFORE THE ACTUAL CONSTRUCTION TO BE ESTABLISHED AT A TIME AND PLACE SET BY THE ENGINEER OF RECORD.
2. THE CONTRACTOR SHALL CONFIRM A SUNSHINE CERTIFICATION NUMBER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
3. PRIOR TO BEGINNING EXCAVATION, THE CONTRACTOR SHALL NOTIFY THE SITE, LOCATION, ELEVATION, AND WHEREABOUTS OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
4. EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH IT FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
6. IF, UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION, UP TO BE OF A SIZE OF MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
7. EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER
8. THE CONTRACTOR SHALL COORDINATE WITH UTILITIES TO ARRANGE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURE ETC. AS NECESSARY TO COMPLETE THE WORK.
9. THE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR, TWO (2) BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR FACILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT
10. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES

III. INSPECTIONS

A. GENERAL

1. THE CONTRACTOR SHALL GIVE THE ENGINEER OF RECORD A MINIMUM OF TWO (2) BUSINESS DAYS ADVANCE NOTICE PRIOR TO BEGINNING OR COMPLETING THE CONSTRUCTION OF THE FOLLOWING ITEMS SO THE ENGINEER OF RECORD CAN PERFORM FIELD OBSERVATIONS OF THE FOLLOWING ITEMS.
   1.1 STORM DRAINAGE
   1.2 SUBGRADE, SUBBASE AND BASE APPROVED DENSITIES PRIOR TO PLACEMENT OF SURFACE
   1.3 LIMEROCK BASE, SUBBASE AND BASE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ASPHALTIC
   1.4 ASPHALTIC CONCRETE
   1.5 CONCRETE
   1.6 STRIPING
2. ALL INSPECTIONS WILL BE MADE BY THE COUNTY AND THE CITY OF OPA-LOCKA (PLUMBING AND ELECTRICAL). THE ENGINEER OF RECORD WILL MAKE ONLY CONSTRUCTION OBSERVATION SERVICES
3. IF THE CONTRACTOR FAILS TO NOTIFY THE ENGINEER OF RECORD PRIOR TO COMPLETING THE ABOVE, THE ENGINEER RESERVES THE RIGHT NOT TO ISSUE ANY CERTIFICATIONS OR FINAL INSPECTIONS

IV. SHOP DRAWINGS

A. GENERAL

1. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD FOR BEHAVIOR SPACE AND OTHER ASSESSMENTS

V. TEMPORARY FACILITIES

A. TEMPORARY UTILITIES

1. IF SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY TO ITS EMPLOYEES AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION

B. TRAFFIC REGULATION

1. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MUTCD. A MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE GOVERNMENTAL ENGINEERING DIVISION HAVING JURISDICTION FOR THE SECTION OF ROADWAY BEFORE STARTING WORK IN THE PUBLIC RIGHT-OF-WAY.
2. ALL OPEN TRENCHES AND VOIDS CONFORMS TO REGULATIONS OF WALKWAYS SHALL BE IMMEDIATELY BARRED AND BARRICADED TO PROTECT THE SAFETY OF BOTH MOTORISTS AND PEDESTRIAN TRAFFIC.
3. NO TRENCHES OR HOLES NEAR ROADWAYS, ROADWAYS OR OTHER SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT CONNECTED PERMISSION OF THE CITY

C. TEMPORARY FACILITIES

1. THE CONTRACTORS ON-SITE EQUIPMENT, STOCKPILED MATERIAL, AND SUPPLIES SHALL BE KEPT IN A SECURE, FENCED AND LOCKED LOCATION WHEN THE CONTRACTOR IS NOT SUPERVISING THE STAGING OR LAY DOWN AREAS.
2. MATERIAL AND EQUIPMENT STORAGE SHALL NOT BE CONDUCTED ON ADJOINING PRIVATE PROPERTY OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.
3. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY ACCESS ROADS AS REQUIRED FOR CONSTRUCTION PROJECT STAGES AT ALL TIMES TO PROVIDE THE SAME NORMAL ACCESS FACILITIES AS WAS PROVIDED PRIOR TO CONSTRUCTION. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION AND MAINTAINING EXISTING TO BE INCLUDED IN W.O.T. BID ITEM
4. CONTRACTOR SHALL SUBMIT LAYDOWN AREA LOCATIONS FOR SELECTION AND REVIEW OF ANY PROPOSED STAGING AREAS ASSOCIATED WITH THIS PROJECT WITH THE CITY OF OPA-LOCKA

VI PROJECT CLOSEOUT

A. CLEANING UP

1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, DOWN DEBRIS, CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAN OF ALL SURPLUS MATERIAL OF WASTE OR DEBRIS AREAS SHALL BE SWEPT BROOM CLEAN
2. THE CONTRACTOR SHALL RESTORE, OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER OR THOSE OF ITS SUBCONTRACTORS, ANY PROPERTY DAMAGED OR DESTROYED BY THE CONTRACTOR OR ANY OF THE EXISTING CONDITION IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. IN THIS END, THE CONTRACTOR SHALL DO ALL WORK AND MAKE ALL PAYMENTS NECESSARY TO RESTORE ALL PROPERTY TO A CONDITION EQUAL TO OR BETTER THAN THAT EXISTING BEFORE THE WORK WAS BEGUN.
3. WATER SOURCES OR STREAMS WHICH HAVE BEEN OR FLOWED INTO OR BEEN MADE IN WATER COURSES, DITCHES, OR OTHER DRAINAGE FACILITIES SHALL BE KEPT FREE OF DEBRIS BY THE CONTRACTOR'S SUPERVISION. SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER AT DISPOSAL OF THE WORK, AND AT NO ADDITIONAL EXPENSE TO THE OWNER.
4. UPON COMPLETION OF THE PROPOSED CULVERT INSTALLATION WORK, THE CONSTRUCTION SHALL CLEAN THE NEW STRUCTURE, REMOVE ALL POLLUTED CONTROL DEVICES FROM THE NEW SYSTEM AND CLEAN THE DOWNSTREAM AREAS AND DRAINAGE STRUCTURES NO ADDITIONAL COST TO THE OWNER

B. PROJECT RECORD DOCUMENTS

1. THE CONSTRUCTION SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF WORK HAVE COMPLETED
2. PRIOR TO THE PLACEMENT OF ANY ASPHALT OR CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER "AS-BUILT PLANS (PRINTED AND SIGNED BY A FLORIDA CERTIFIED PROFESSIONAL LAND SURVEYOR) SHOWING THE LOCATION AND ITS NEW APPURTENANCE IMPROVEMENTS. PRIOR OPERATIONS SHALL NOT COMMENCE UNTIL THE ENGINEER HAS APPROVED THE "AS-BUILTS."
3. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR SUB-GRADE SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING ASPHALT
4. ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE AUTHORIZABLE ACCURATE, CLEAR AND LEGIBLE. TO SATISFY BE CHANGED BACK TO THE SATISFACTION INCLUDES A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED
5. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD COMPLETE SETS OF "AS-BUILT" CONSTRUCTION DRAWINGS SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL LAND SURVEYOR FOR REVIEW AND APPROVAL. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND EMBOSSED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR
6. THE COST OF SIGNED AND SEALED AS-BUILTS AND CAD FILES SHALL BE INCLUDED IN THE COST OF THE CHANGE BID

VII. EARTHWORK

A. GENERAL

1. NONE OF THE EXISTING MATERIAL IS TO BE INCORPORATED IN THE EMBANKMENT.
2. ALL SAND BORROW PLACED SHALL HAVE A MINIMUM LBR VALUE OF 40 AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180
3. ALL LIMEROCK IS ASSUMED NOT TO HAVE BEEN COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180
4. A 4" LAYER OF BERMUDA SHALL BE PLACED OVER ALL AREAS TO BE SODDED
5. DAMAGED TO DAMAGED SOD SHALL BE REPLACED WITH SAME SOD THAT AS EXISTING AND SHALL BE INCLUDED IN THE CONTRACT PRICE AND NO EXTRA COMPENSATION SHALL BE ALLOWED
6. ASSURANCE OF THE PROJECT
7. ALL DISTURBED AREAS FOLLOWING EXISTING DRAINAGE SWALES OR LAKES, APPROPRIATE SILT/TURBIDITY CONTROL COST TO BE INCLUDED IN THE BID
8. ALL EXCAVATED OR OTHER UNSUITABLE MATERIAL UNDER THOSE AREAS TO BE PAVED SHALL BE REMOVED TO A DEPTH OF 24 INCHES BELOW FINISHED GRADE AND FOR SHRUBS FEET BEYOND THE PERIMETER OF THE PLANTS
9. SUITABLE BACKFILL SHALL BE MINIMUM NON ROCK MATERIALS COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 UNDER ALL PAVED AREAS OR PERIMETER OF PLANTS
10. ALL EXCAVATION TO BE EARTH MATERIAL SHALL FREE FROM ROCK, LIMEROCK OR OTHER UNSUITABLE MATERIAL
11. ALL EXCAVATION TO BE EARTH MATERIAL SHALL FREE FROM ROCK, LIMEROCK OR OTHER UNSUITABLE MATERIAL
12. ALL EXCAVATION TO BE EARTH MATERIAL SHALL FREE FROM ROCK, LIMEROCK OR OTHER UNSUITABLE MATERIAL
13. ALL EXCAVATION TO BE EARTH MATERIAL SHALL FREE FROM ROCK, LIMEROCK OR OTHER UNSUITABLE MATERIAL
14. ALL EXCAVATION TO BE EARTH MATERIAL SHALL FREE FROM ROCK, LIMEROCK OR OTHER UNSUITABLE MATERIAL
15. ALL EXCAVATION TO BE EARTH MATERIAL SHALL FREE FROM ROCK, LIMEROCK OR OTHER UNSUITABLE MATERIAL
16. ALL EXCAVATION TO BE EARTH MATERIAL SHALL FREE FROM ROCK, LIMEROCK OR OTHER UNSUITABLE MATERIAL
17. GRADING ADJACENT TO ROADWAY/PAVEMENT WHERE SIDEWALK/BIKE FLOWS FROM PAVEMENT TO GROUND SHALL BE GRADED TWO TO FIVE INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.
18. ALL AREAS TO BE CONSTRUCTED UPON WITH STRUCTURES, PAVEMENT, DRAINAGE, WATER MAINS, CURBING, SIDEWALK, FLOORING, ETC., SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL OF AND DISPOSAL OF ALL STUMPS, BRUSH, TIMBER, ROOTS, DEBRIS, ORGANIC MATERIAL AND ALL OTHER OBJECTIONABLE MATERIAL ON OR UNDERGROUND, SURFACE OF THE EXISTING GROUND TO A DEPTH OF 9 INCHES ALL WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS
19. ALL PROPOSED GRADES SHOWN IN PLAN ARE FINISHED GRADES

VIII. PAVING

A. GENERAL

1. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF THE LIMEROCK BASE AND PRIOR TO THE PLACEMENT OF THE PAVEMENT ALL WORK IN EXISTING PAVEMENT SHALL BE SAW-CUT EDGES PRIOR TO RELAYING ASPHALT ALL EXISTING PAVEMENT, DRIVEWAY AND SIDEWALK THAT IS AFFECTED AND TOP PART OF THE CONSTRUCTION PROCESS SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE

B. MATERIALS

1. LIMEROCK BASE MATERIAL SHALL HAVE A MINIMUM OF 70% CARBONATES (CALCIUM AND MAGNESIUM) WITH A MINIMUM LBR OF 100.
2. PRIME COAT SHALL BE APPLIED AT THE RATE OF 0.25 GAL/SQ YD AND TACK COAT SHALL MEET FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS.
3. SURFACE COURSE SHALL BE EQUAL TO FDOT TYPE SP-9.5 OR SP-12.5 ASPHALTIC CONCRETE

C. INSTALLATION

1. LIMEROCK BASE MATERIAL SHALL BE 12" THICK AND COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180
2. LIMEROCK BASE OR BITUMINOUS SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" OF LIMEROCK SHALL BE PLACED IN TWO OR MORE EQUAL LIFTS. LIMEROCK BASE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180
3. ASPHALTIC CONCRETE SHALL BE 1" FDOT TYPE SP-9.5 (TRAFFICAL AND 1" SP-12.5 FOR LIFT MATCHING EXISTING GRADES AT LANES OF TRAVEL)
4. PRIME COAT SHALL BE APPLIED ON ALL LIMEROCK BASES IN ACCORDANCE WITH FDOT STANDARDS
5. TACK COAT SHALL BE PLACED AS REQUIRED IN ACCORDANCE WITH FDOT STANDARDS
6. BASE COURSE CONSTRUCTION SHALL NOT BE STARTED UNTIL ALL UNDERGROUND CONSTRUCTION IN THE AREA HAS BEEN COMPLETED AND APPROVED
7. PAVEMENT SAW-CUTS SHALL BE CLEAN AND SQUARED UNTIL
   7.1 A MINIMUM OF 2 FEET OF EXISTING TO DETERMINE IF THERE IS ANY REMAINING WORK THAT MUST BE DONE BEFORE PAVING
   7.2 ALL LANDSCAPING WORK SHALL WORK CHASE SHARPLY TO THE FINAL GRADES COMPLETE
   7.3 ALL UNDERGROUND WORK AND INSTALLATIONS HAVE BEEN ACCEPTED AND A FINISHED ROAD SURFACE HAS BEEN SUBMITTED TO AND ACCEPTED BY THE HIGHWAY CONSTRUCTION & ENGINEERING DIVISION.

D. TESTING

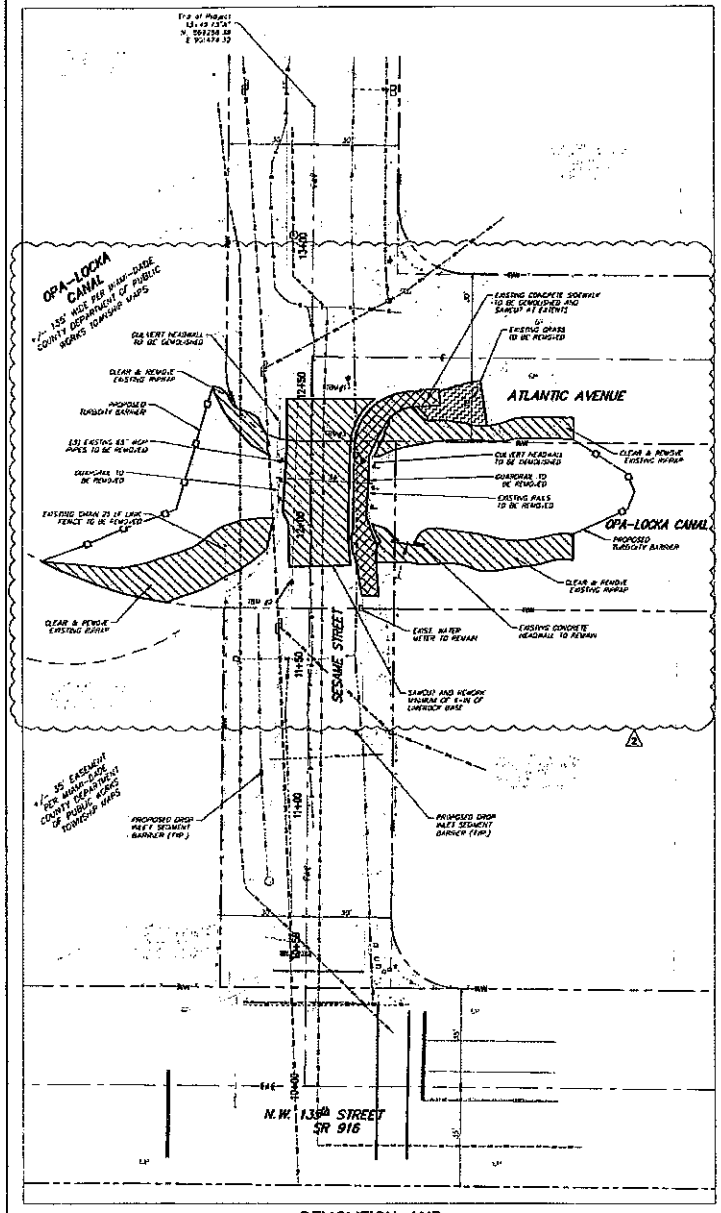
1. ALL SUB-GRADE, EMBANKMENT AND ASPHALT TESTS REQUIRED SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER AND NEW CERTIFICATION/TESTS PERFORMED
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST AND TIME THAT MUST START FROM ANY MISSED OR CHANGE STRUCTURE INSTALLED IN PAVED AREAS

SIGNING AND MARKINGS

1. ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION, & FDOT.
2. ALL PAVEMENT MARKINGS SHALL BE APPLIED AFTER FINAL ASPHALT RESURFACING HAS BEEN COMPLETED. CONTRACTOR SHALL MAINTAIN TRAFFICE DURING PERIOD PLACE TEMPORARY/PLASTIC PAVEMENT MARKINGS.
3. ALL PERMANENT YELLOW PAVEMENT MARKINGS SHALL BE PROVIDED AT 90 MILS THICKNESS ON EPOXY BASE OF DURABLE PREMIXED BEADS.
4. ALL DIRECTIONAL ARROW/WORD REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED AT 7 INTERVALS AT ALL INTERSECTIONS.
5. BI-DIRECTIONAL WHITE/YELLOW REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED AT 20' INTERVALS ALONG SOLID WHITE LINES PLACED ON EDGE OF PAVEMENT OR SAME LANE LINES).
6. RESTRICTIVE PAVEMENT MARKINGS SHALL BE GLASS BEADED MARKINGS MANUFACTURED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS 706 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
7. ALL SIGNING SHALL BE EMBOSSED USING TYPE III SHEETING, AS PER MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS AND/OR SPECIFICATIONS.
8. ALL PAVEMENT MARKINGS AND SIGNING DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION.
9. EXISTING SURFACING SHALL BE REMOVED BY SHEET BLASTING ONLY.
10. SEE SIGNING AND PAVING PLANS FOR ADDITIONAL INFORMATION.
11. ALL EXISTING SIGNALIZATION EQUIPMENT TO REMAIN IS ASSUMED TO BE IN GOOD WORKING ORDER UNLESS OTHERWISE NOTED. ANY DAMAGE OR MALFUNCTIONS OCCURRING DURING CONSTRUCTION SHALL BE REPAIRED TO THE SIGNAL EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE

MAINTENANCE OF TRAFFIC

1. ROUTE DETOURS, WHERE REQUIRED, SHALL BE IN ACCORDANCE WITH THE PROJECT TRAFFIC PLANS, THE CURRENT EDITION OF THE FDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS APPROVED LOCALLY.
2. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY DEFICIENCIES THAT DEVELOP WITHIN PROJECT LIMITS AND ALL MAINTAIN A SURFACE OF COLD MIX ON THE PROJECT SITE, AS DIRECTED BY THE ENGINEER. THESE REPAIRS ARE TO BE PERFORMED AT NO EXPENSE TO THE OWNER. ALL WORK, MATERIALS AND METHODS SHALL BE INCLUDED AS PART OF THE OVERALL BID.
3. REQUEST FOR PROPOSED LANE CLOSURES OR TEMPORARY DETOURS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL WHERE NECESSARY MAINTENANCE AGREED TO CLOSURE OR DETOUR.
4. AT THE DISCRETION OF THE ENGINEER, IF A LANE CLOSURE CAUSES EXCESSIVE CONGESTION OR DELAYS, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN THE CLOSED LANE(S) UNTIL SUCH TIME THAT TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.
5. NO VEHICLE SHALL DRIVE SHALL NOT BE ALLOWED BY THE CONT



DEMOLITION AND EROSION CONTROL PLAN
SCALE: 1" = 20'

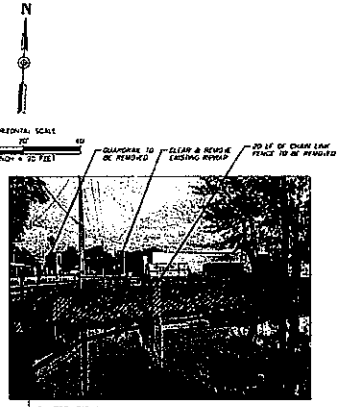


PHOTO 1

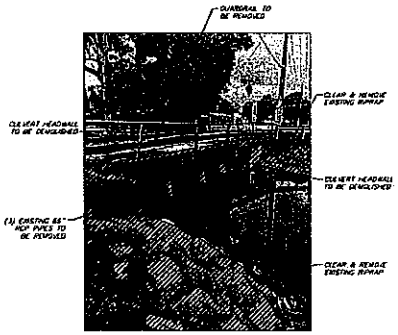
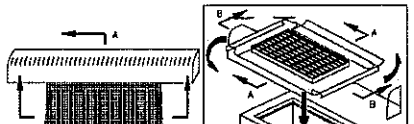


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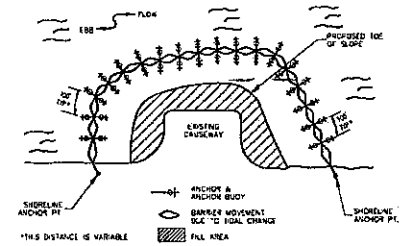


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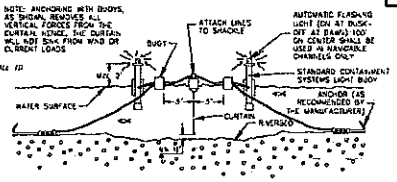


NOTE:
1. CONTRACTOR SHALL PERFORM DAILY INSPECTIONS TO ENSURE GEO-TEXTILE FABRIC IS NOT RIPPED OR BROKEN. CONTRACTOR SHALL INSPECT AFTER RAIN STORM EVENTS.

PROPOSED DROP INLET SEDIMENT BARRIER
SCALE: 1" = 20'



TURBIDITY BARRIER LAYOUT PLAN
SCALE: 1" = 20'



TURBIDITY BARRIER SECTION
SCALE: 1" = 20'

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- EXISTING RIP RAP
- EXISTING CONCRETE TO BE REMOVED
- EXISTING CULVERT & RIPRAP TO BE REMOVED
- EXISTING GRASS TO BE REMOVED
- PROPOSED TURBIDITY BARRIER

NOTES

1. ALL AREAS DAMAGED BY CONTRACTOR, INCLUDING BUT NOT LIMITED TO SIDEWALKS PAVEMENT MARKINGS, ASPHALT, AND DRIVEWAYS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.
2. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO PROPOSED IMPROVEMENTS.
3. THE CONTRACTOR SHALL MAINTAIN FLOW WITHIN THE CANAL DURING CONSTRUCTION. THE EXISTING CULVERT PIPES. THE CONSTRUCTION SEQUENCE SHALL BE PERFORMED DIGERLY AS TO MINIMIZE WATERWAY IMPACTS.
4. THE DEMOLITION WORK WITHIN THE CANAL SHALL TAKE PLACE ONLY AFTER EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND IN WORKING ORDER.
5. ALL EXISTING SIGNS IMPACTED BY CONSTRUCTION SHALL BE PROVIDED, AS NECESSARY, AT CONTRACTORS EXPENSE.
6. ALL EXISTING TREES SHALL BE MAINTAINED AND PROTECTED SO AS TO MINIMIZE IMPACTS. UNLESS TREE MITIGATION/REMOVAL IS REQUIRED, IT SHALL BE COORDINATED BY THE CONTRACTOR TO OBTAIN NECESSARY PERMITS.
7. IF BYPASS PUMPING IS REQUIRED, THE CONTRACTOR IS RESPONSIBLE FOR ITS DESIGN / SELECTION AND SPECIFICATION. BYPASS PUMPING PLAN SHALL SHALL BE SUBMITTED TO THE EOR FOR APPROVAL DURING SHOP DRAWINGS REVIEW.
8. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR THE INCOMPLETENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO VERIFY AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO COMPLY, LOCATE AND SHOW EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT EXCAVATION) COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RONALDO RIVERA, PE. ON 6/2/23.
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CITY OF OPA-LOCKA, FLORIDA

309

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES
DEMOLITION AND EROSION CONTROL PLAN

DRAWING HISTORY
DS 03/09/23 AS
DS 04/26/23 AS
DS 05/09/23 AS

REVISIONS
1 CDM COMMENTS 05/09/23 AS
2 CDM COMMENTS 06/15/23 AS
3 CDM COMMENTS 06/28/23 AS

APPROVALS
DJS AS
PE PE

RONALDO J. RIVERA LICENSE No. 63478 STATE OF FLORIDA PROFESSIONAL ENGINEER

Ronaldo J. Rivera, P.E.
Civil Engineer
STATE OF FLORIDA - LICENSE NO. 63478
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CORAL GABLES, FLORIDA 33134
(305) 755-2605

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OPA-LOCKA-C-01.DWG
6/2/23 AS SHOWN

C-01
3 OF 15

A. DEMOLITION NOTES

1. THE CONTRACTOR IS ENCOURAGED TO PHOTOGRAPH AND/OR VIDEO THE SITE AS WELL AS MAKE ONE PLANS AND SPECIFICATIONS AVAILABLE TO SUBCONTRACTORS. CONTRACTOR WILL NOT BE RESPONSIBLE FOR CLAIMS FOR ADDITIONAL COMPENSATION FOR CONDITIONS KNOWN TO EXIST AT THE TIME OF THIS DEMOLITION PLAN.
2. THE DEMOLITION PLAN IS BASED ON AVAILABLE UTILITY INFORMATION AND MAY OR MAY NOT BE ALL INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY UTILITY COMPANIES FOR THE LOCATION OF THEIR UTILITIES PRIOR TO THE START OF DEMOLITION. ANY DAMAGE RESULTING FROM THE DEMOLITION WORK SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR IS REQUIRED TO OBTAIN ALL DEMOLITION PERMITS AND PAY ALL ASSOCIATED FEES.
4. ALL FIXTURES & EQUIPMENT OR ITEMS FROM WHICH ARE NEEDED TO BE SALVAGED AND TO BE REMOVED FROM THE SITE BEFORE DEMOLITION OF COMPLEX IF THE SITE SHALL BE DELIVERED IN A CONDITION SUITABLE FOR REDEVELOPMENT.
5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
6. CONTRACTOR TO USE CARE IN REMOVING DEBRIS FROM THE SITE TO ENSURE THE SAFETY OF THE PUBLIC WHILE YOU ARE ON SITE. DEBRIS MONITORED FOR SIGNS OF HAZARDS, PROVIDE OPEN DUMPING MACHINES, SECURE THE MACHINES AND BARRICADES TO BE CLEARED AND REMOVED AT THE END OF THE PROJECT FOR SAFETY.
7. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT CLEANLY TO REMAINING IMPROVEMENTS.
8. ALL SITE PLAN LIGHTING TO BE REMOVED AS NEEDED.
9. CONTRACTOR TO MAINTAIN ENTRANCE ROAD FOR CIVIL DURING AND AFTER CONSTRUCTION. FURTHERMORE, CONTRACTOR TO MAINTAIN ENTRANCE ROAD FOR CIVIL DURING AND AFTER CONSTRUCTION.
10. ALL TRENCHES LEFT OPEN AT THE END OF EACH WORKING DAY SHALL BE BARRICADED AND ADEQUATE TOP EARTH DIMENSION TO BE MAINTAINED. ALL TOP SOILS, EXCESS MATERIALS, AND DEBRIS SHALL BE REMOVED FROM THE SITE.
11. CONTRACTOR TO MAINTAIN PEDESTRIAN TRAFFIC FLOW DURING REMOVAL/RECONSTRUCTION OF SIDEWALKS.

B. BEST MANAGEMENT PRACTICES (BMPS)

1. THIS PLAN HAS BEEN PREPARED TO ENSURE COMPLIANCE WITH APPROPRIATE CONDITIONS OF THE NPDES – DADE COUNTY STORM DEVELOPMENT REGULATIONS, THE RULES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), CHAPTER 17-25, F.A.C., THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), CHAPTER 40E-1, F.A.C. AND THE MIAMI-DADE COUNTY PROTECTION AGENCY (DERM) DOCUMENT NO. CPA 6622/P-/87-308 (DECEMBER 1987). THE PLAN ADDRESSES THE FOLLOWING:
   A. ON-SITE LOSS OF SOIL DURING CONSTRUCTION BY STORMWATER RUNOFF AND/OR WIND EROSION, INCLUDING PROTECTING TOPSOIL BY LOCATING IT FOR REUSE.
   B. SEDIMENTATION (DEPOSITION OF SOILS).
   C. PREVENT POLLUTING THE AIR WITH DUST AND PARTICULATE MATTER. THE APPROPRIATE TECHNIQUES OR METHODS CONSIDERED UNDER EACH EROSION PREVENTION AND SEDIMENTATION CONTROL MEASURE THAT THE CONTRACTOR SHOULD BE EMPLOYED IN AS NO EFFECTIVE IS A CROSS-REFERENCE TO A SECTION OR FIGURE REPRESENTING THE TECHNIQUE. IT SHOULD BE NOTED THAT THE MEASURES DEPICTED ON THIS PLAN ARE ONLY SUGGESTED EXAMPLES OF CONTROLLING SOIL EROSION AND POLLUTION AND SHOULD BE MODIFIED AS NECESSARY OR DESIRED IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITTING. CONTRACTOR SHALL PREPARE REQUIRED NOTICE OF INTENT (NOI) DOCUMENTATION AND OBTAIN PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE REQUIRED NOI'S AND OBTAIN THE NPDES PERMIT. ALL COSTS ASSOCIATED WITH SUCH PERMIT SHALL BE DEEMED INCIDENTAL TO THE PROJECT LUMP SUM COST.

C. GENERAL EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THESE EROSION CONTROL DRAWINGS, THE STANDARD DETAILS, THE ANSI/EPA PERMIT (TO BE OBTAINED BY CONTRACTOR) AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS MUST ADHERE WITH STORM WATER POLLUTION PREVENTION PLAN. CERTIFICATE & COPY OF THIS DRAWING SAME ONE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND EROSION TRAINING WITH THEIR EMPLOYEES.
3. CONTRACTOR SHALL OBTAIN AND MAINTAIN ALL SITE CONDITIONS AND CONSTRUCTION ACTIVITIES REQUIRED.
4. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP) IN ALL CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   A. FUEL SPILLS AND LEAKS PREVENTION
   B. PREVENTATIVE VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
   C. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR
   D. PROPER DISPOSAL/HANDLING/RECYCLING OF MATERIALS
   E. PROPER STANDARDS TO ENSURE STORAGE OF RAW MATERIALS, PRODUCTS, AND BY-PRODUCTS
   F. SOLID WASTE MANAGEMENT
   G. HAZARDOUS WASTE MANAGEMENT
   H. CONCRETE WASTE MANAGEMENT
   I. SANDBLASTING WASTE MANAGEMENT
   J. STRUCTURAL CONSTRUCTION AND PAINTING
   K. SPILL PREVENTION AND CONTROL
   L. CONTAMINATED SOIL MANAGEMENT
   M. SANITARY/SEPTIC WASTE MANAGEMENT
   N. SOIL EROSION CONTROL
   O. STORM WATER QUALITY MANAGEMENT
5. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
6. BEST MANAGEMENT PRACTICES (BMPS) AND TECHNIQUES SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICES, WHICHEVER CONSTRUCTION SHALL IMPLEMENT ADDITIONAL BMPS THAT ARE REQUIRED BY REGULATORY AGENCY OR OWNER.
7. CONTRACTOR SHALL OBTAIN AND PAY ALL STATE, WATER, CONTRACTOR SHALL MAINTAIN ALL PERMITS FOR ANY CONSTRUCTION DEWATERING ACTIVITIES AND IN NO CASE IS WATER ALLOWED TO LEAVE THE SITE WITHOUT THESE PERMITS.
8. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MINIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
9. CONTRACTOR SHALL BEGIN CLEARING AND GRUBBING ONLY AFTER ALL PHASES OF THE EROSION AND SEDIMENT CONTROL PLAN (SWPPP) MEASURES, CLEARING AND GRUBBING FOR THE REMAINING PORTIONS OF THE PROJECT SITE SHALL COMMENCE ONLY AFTER PERIMETER CONTROLS ARE IN PLACE. PERIMETER CONTROLS SHALL BE KEPT IN MAINTAINED UNTIL SOD AREAS HAVE BEEN STABILIZED AND SHALL BE REMOVED ONCE FINAL STABILIZATION IS COMPLETE.
10. GENERAL EROSION CONTROL BMPS SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND POTENTIAL CANAL POLLUTANTS CAUSE ONE SPILL. THE VARIOUS TECHNIQUES OR DEVICES MAY BE USE AND MAY BE SPECIFIED, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION.
11. ON-SITE & OFF-SITE SOIL STOCKPILES AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILES AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
12. SURFACE WATER QUALITY SHALL BE MAINTAINED BY IMPLEMENTING THE FOLLOWING BMPS IN THE CONSTRUCTION PLANNING AND EXECUTION OF ALL EARTHWORK:
   A. NO PUMPING OF WATER SHALL TAKE PLACE UNLESS WATER IS FIRST DISCHARGED THROUGH A SEDIMENT CONTROL DEVICE.
   B. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SURROUNDING AREA IS STABILIZED.
   C. WHERE NEEDED A TEMPORARY SEDIMENT TRAP SHALL BE FABRICATED TO RETAIN SEDIMENT-LADEN WATER FROM DISTURBED AREAS.
   D. SILT BARRIERS, SHALL BE PLACED WHEN ACCUMULATED AROUND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED IMMEDIATELY AFTER THE SOD OR MAINTENANCE WORK AROUND THE BARRIERS IS COMPLETE.
   E. BARRIERS OF BARRIER OR RETENTION/DETENTION BASINS SHALL BE CONSTRUCTED INTO STEEPER THAN 3H:1V FROM TOP OF BANK TO TWO FEET BELOW NORMAL WATER LEVEL, AS APPLICABLE.
   F. SOD SHALL BE PLACED FOR A 10-FOOT WIDE STRIP HORIZONTAL ALL DRAINS AND AROUND ALL INLETS. SOD SHALL BE PLACED WITHIN 24 HOURS OF BARRIERS AND INLETS.
   G. WHERE NECESSARY TO PREVENT EROSION FROM SWIFT FLOW ACROSS BARE GROUND FROM ENTERING A BANK OF WATER, A TEMPORARY SEDIMENT TRAP SHALL BE CONSTRUCTED.
13. SILT FENCE BARRIER SHOULD BE USED FOR STORM DRAIN INLET PROTECTION BEFORE FINAL STABILIZATION.
14. TEMPORARY, TURBIDITY BARRIERS SHALL BE INSTALLED TO CONTROL TURBIDITY WHICH MAY BE CAUSED BY CONSTRUCTION AND INSTALLATION OF DRAINAGE OUTFALL PIPE AND STRUCTURES.
15. EXISTING DRAINAGE FLOW PATTERNS AND POSITIVE DRAINAGE TO EXISTING OUTFALLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
16. ALL SILT FENCE BARRIERS UNDER THIS PROJECT SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION.

D. STORM WATER EROSION CONTROL PRACTICES

1. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENTS FROM RETENTION PONDS AND SEDIMENTS THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONNECTION WITH THE CONSTRUCTION OF THIS SITE.
2. WITH THE EXCEPTION OF THE INITIAL PREVENTED CONDITION DURING THE GRADING PHASE TO MINIMIZE RUNOFF VELOCITIES AND EROSION.
3. DUE TO THE CLOSE PROXIMITY DURING THE DEVELOPMENT OF THE SITE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSISTING THE EROSION CONTROL MEASURES (CONSTANT SOON LEAVES, ETC.) TO PREVENT EROSION.
4. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES.
5. EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. SINCE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED AS DIRECTED BY THE ENGINEER.
6. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE EARLIEST PRACTICAL, DOWNHILL LOCATIONS.
   A. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SURROUNDING AREA IS STABILIZED.
   B. WHERE NEEDED A TEMPORARY SEDIMENT TRAP SHALL BE FABRICATED TO RETAIN SEDIMENT-LADEN WATER FROM DISTURBED AREAS.
   C. SILT BARRIERS, SHALL BE PLACED WHEN ACCUMULATED AROUND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED IMMEDIATELY AFTER THE SOD OR MAINTENANCE WORK AROUND THE BARRIERS IS COMPLETE.
   D. BARRIERS OF BARRIER OR RETENTION/DETENTION BASINS SHALL BE CONSTRUCTED INTO STEEPER THAN 3H:1V FROM TOP OF BANK TO TWO FEET BELOW NORMAL WATER LEVEL, AS APPLICABLE.
   E. SOD SHALL BE PLACED FOR A 10-FOOT WIDE STRIP HORIZONTAL ALL DRAINS AND AROUND ALL INLETS. SOD SHALL BE PLACED WITHIN 24 HOURS OF BARRIERS AND INLETS.
   F. WHERE NECESSARY TO PREVENT EROSION FROM SWIFT FLOW ACROSS BARE GROUND FROM ENTERING A BANK OF WATER, A TEMPORARY SEDIMENT TRAP SHALL BE CONSTRUCTED.
7. SILT FENCE BARRIER SHOULD BE USED FOR STORM DRAIN INLET PROTECTION BEFORE FINAL STABILIZATION.
8. TEMPORARY, TURBIDITY BARRIERS SHALL BE INSTALLED TO CONTROL TURBIDITY WHICH MAY BE CAUSED BY CONSTRUCTION AND INSTALLATION OF DRAINAGE OUTFALL PIPE AND STRUCTURES.
9. EXISTING DRAINAGE FLOW PATTERNS AND POSITIVE DRAINAGE TO EXISTING OUTFALLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
10. ALL SILT FENCE BARRIERS UNDER THIS PROJECT SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION.

E. WIND EROSION CONTROL PRACTICES

1. WIND EROSION SHALL BE CONTROLLED BY EMPLOYING THE FOLLOWING MEASURES AS NECESSARY AND APPROPRIATE:
   A. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN SUFFICIENTLY WATERED OR HAS BECOME DRY. DUST SHALL NOT BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.
   B. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED OVER PERMANENT STABILIZATION PROVIDES FOR DETAILS. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN. CLEARED SITE DEVELOPMENT AREAS NOT CONTINUALLY SCHEDULED FOR CONSTRUCTION ACTIVITIES SHALL BE STABILIZED WITH MULCH OR OTHER ACCEPTABLE AND PERIODICALLY WATERED IMMEDIATELY TO STABILIZE THE TEMPORARY UNDERCUTTING (SEE TEMPORARY STABILIZATION PRACTICES FOR DETAILS).
   C. AT ANY TIME BOTH CUTTING AND FILLING ARE CONSTRUCTION THAT WATERING AND/OR REVEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION, ANOTHER TEMPORARY STABILIZATION METHOD SHALL BE EMPLOYED AS NECESSARY (SEE SOIL CONTROL). SHALL BE EMPLOYED. SHALL BE USED TO PREVENT ERECTION OF DUST CONTROL DEVICES A 4'—11' SECURITY FILTER CLOTH SHALL BE INSTALLED AROUND THE ENTIRE LENGTH OF THE EXTERIOR FENCE LINE, STREET AND LOT.
2. ALL DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF WATER USE AND OTHER PETROLEUM BASED OIL TYPE SOLVENTS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

F. STABILIZATION PRACTICES

1. SHALL BE IN ACCORDANCE WITH BMP DOCUMENT NO 82-87/ 3000(A).
2. DISTURBED PORTIONS OF SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASE FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA.
3. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY PERMANENTLY CEASE SHALL BE STABILIZED WITH SOD NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

G. STRUCTURAL PRACTICES

1. SHALL BE IN ACCORDANCE WITH BMP DOCUMENT NO 82-87/ 3000(A).

H. WASTE DISPOSAL

1. WASTE MATERIALS — ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER OR A RECEPTACLE OR IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. NO DUMPSTER SHALL BE OVERLOADED SO THAT LOCAL ORDINANCES OR ANY OF THE DUMPSTER CONTENTS ARE EXPOSED. ONCE A WEEK AND THE SAME DAYS TO ANY ENTERPRISE LANDFILL NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. ALL PERSONNEL SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. A SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL MANAGEMENT.
2. HAZARDOUS WASTE — HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE TRAINING SESSIONS FOR EMPLOYEES IN THE PROPER PROCEDURES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. EVERY PRECAUTIONARY MEASURE SHALL BE TAKEN TO PREVENT ACCIDENTAL SPILLAGE. ALL PROCEDURES SHALL BE FOLLOWED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE THE ONE WHO IS RESPONSIBLE FOR THE ENFORCEMENT.
3. SANITARY WASTE — ALL SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL ARRANGE FOR REGULAR SERVICE WITH A LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK OR AS NEEDED.
4. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL NOT BE DEPOSITED ON OR INTO THE WATERS OF THE STATE OR ONTO LANDS IN SUCH MANNER THAT THEY MAY BE CARRIED INTO THE WATERS OF THE STATE BY WIND OR WATER. ALL SOLID WASTE SHALL BE CONTAINED AND DISPOSED OF OR STORED AND SECURED IN APPROVED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM BECOMING POLLUTANTS BY THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE SYSTEMS OR WATERS OF THE STATE.

I. OFFSITE TRACKING

1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE MAJOR ROAD CONNECTED TO THE PROJECT SHALL BE CLEANED DAILY OR AS NEEDED, AND EXCESS MUD, DIRT OR ROCK REMOVED FROM CONSTRUCTION STARTS. ALL TRUCKS LEAVING WORKSPACE ENTIRE SHALL BE COVERED WITH A TARPAULIN.
2. GENERAL CONSTRUCTION SHALL DEVOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATION PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. NO OFF CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND BREAKWATER STRUCTURES. CONDITIONS SHALL PROVIDE SHOULD SHALL NOT EXIST OR SILT SCREENS, BRUSH, AND SEDIMENT SUMPS. WORK SHOP AREAS AS REQUIRED TO CONTAIN SPILLS OF OIL, GREASE OR LUBRICANTS. CONTRACTORS SHALL NOT USE DETERGENTS AND SHALL USE ABSORBENT MATERIALS ON ANY SPILLS AS SOON AS POSSIBLE AFTER DISCOVERY.
3. ALL SITE MAINTENANCE, CONCRETE TRUCK, ASPHALT CLEANING, EQUIPMENT CLEANING, ETC. SHALL BE DEFINED AND DESIGNED TO CONTAIN ANY WASTE GENERATED AND NOT ALLOW DISCHARGE OF HAZARDOUS MATERIALS OR WASTE INTO THE GROUND OR INTO ANY WATERS OF THE STATE.
4. AT THE END OF EACH WORKING DAY, ALL CONSTRUCTION ENTRANCES ARE NOT SUFFICIENT TO REMOVE MUD FROM TIRES. ADDITIONAL MEASURES MAY BE REQUIRED, SUCH AS WASHING THE TIRES BEFORE THE VEHICLE ENTERS A PUBLIC ROAD, IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT AND TREAT WASH WATER AND SILT BEFORE IT IS DISCHARGED OFF THE SITE.
5. ALL INTERNAL PAVED, GRADED, DRIVING, MUDDED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

J. MAINTENANCE

1. ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL PERTINENT DOCUMENTATION CONTAINING RECORDS SHALL BE OVERSEEN BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
   A. RILES PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
   B. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOWING BARE SPOTS, WASHOUTS, AND RILLS SHALL BE REPAIRED AS NEEDED.
   C. THE EXPOSED FACE OF BARRIER DEVICES SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND EVIDENCE OF UNDERMINING. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH A DEPTH OF 1/2 THE HEIGHT OF THE CONTROL DEVICE.
   D. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCE AS CONDITIONS DEMAND.
   E. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
   F. DIRECT STRUCTURES IN THE STORMWATER SYSTEM SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. THE SEDIMENT REMOVED FROM THESE STRUCTURES SHALL BE DISPOSED IN SUCH A MANNER THAT IT WILL NOT BE SUBJECT TO FURTHER EROSION AND TRANSPORTATION. SEDIMENT REMOVED FROM STORAGE AREAS SHALL BE REMOVED AND STABILIZED AT THE TIME WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50% AND AFTER CONSTRUCTION IS COMPLETED.
   G. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION/EROSION GAPES SHALL BE INSPECTED MONTHLY AND FOLLOWING 25.01 OR MORE INCH RAINFALL.
   H. A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL MEASURES. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE KEPT FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.
   I. ALL REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.
   J. THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS. THE SUPERINTENDENT SHALL COMPLETE ADDITIONS AND REPORTS.
   K. SEDIMENTS SHALL BE REMOVED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM ONE SILT FENCE BEFORE IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
2. THE EROSION CONTROL MEASURES INSTALLED BY THE CONTRACTOR SHALL BE ACCEPTABLY MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.

K. SPILL PREVENTION AND CONTROL

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

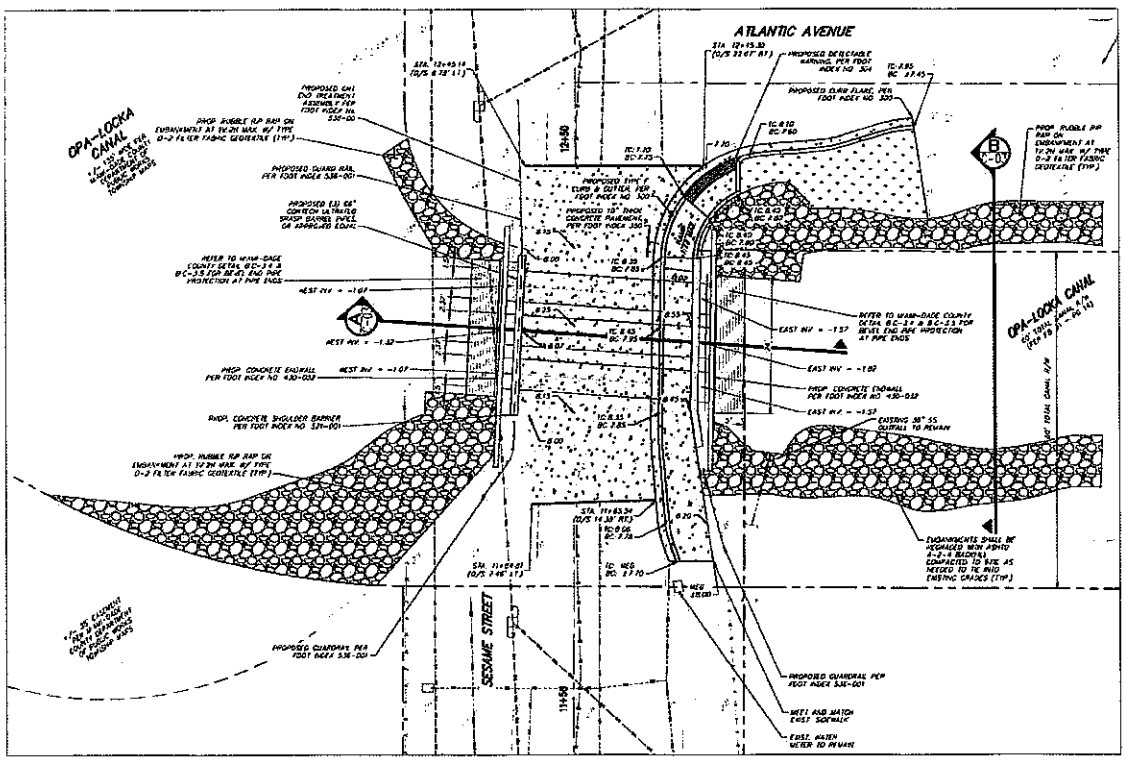
1. GOOD HOUSEKEEPING
   A. SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.
   B. STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.
   C. ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.
   D. ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR WATERPROOF COVER.
   E. PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER. I. ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
   F. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
2. HAZARDOUS PRODUCTS
   A. MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINERS WITH ORIGINAL LABELS. ORIGINAL CONTAINERS CANNOT BE DAMAGED OR ORIGINAL CONTAINERS CANNOT BE LOST. LABELS AND PRODUCT INFORMATION SHOULD BE SAVED.
   B. PROPER DISPOSAL PROCEDURES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.
3. PRODUCT SPECIFIC PRACTICES
   A. PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. REMOTE CONTAINING PETROLEUM DERIVATIVE SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.
   B. THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED ONTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZER STORED ON SITE SHALL BE STORED IN A COVERED AREA. ANY UNUSABLE USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A STABLE PLASTIC BAG TO AVOID SPILLS.
   C. PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.
   D. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   E. CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR WASH DOWN BY WATER ON THE SITE.

H. SPILL CLEAN UP

1. IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED ABOVE, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
   A. SPILL CLEANUP INFORMATION SHALL BE KEPT CLOSE TO SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.
   B. USE TO CLEAN—UP EQUIPMENT MUST BE AVAILABLE FOR ANY MATERIAL BEING USED ON SITE. THIS SHALL INCLUDE A SUFFICIENT STOCK PILE OF SAND, SAWDUST, LIQUID ABSORBENT, GOGGLES, AND BRUSH CONTAINERS.
   C. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOATION BOOMS SHALL BE MAINTAINED ONSITE AND READILY AVAILABLE TO CONTAIN AND CLEAN—UP FUEL OR CHEMICAL SPILLS AND LEAKS.
   D. ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.
   E. WHEN CLEANING A SPILL, ONE MAY SHOULD BE USED. AVAILABLE AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE CLOTHING TO PREVENT INJURY.
   F. SPILL SHALL NOT BE PERMITTED TO BE THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.
   G. AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SPILLS. SHALL BE MODIFIED TO ADDRESS THE CAUSE OF THE SPILL. MEASURES TO THE EFFECTIVE AND HOW TO CLEAN THE SPILL OF ANY SPILL.
   H. THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. HE SUPERINTENDENT ALSO GUARANTEE THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR REVIEWING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

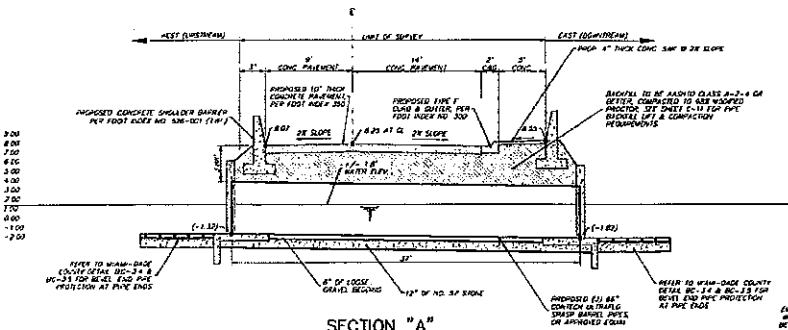
L. SEQUENCE OF CONSTRUCTION

1. SEQUENCING FOR THE INSTALLATION OF THE FOLLOWING (MAJOR TRAILER, PARKING, LAY DOWN, STORM—WATER, WELL, ETC.) SHALL BE CONSIDERED TO MAINTAIN FUEL AND MATERIAL STORAGE DRAINAGES. SOLID WASTE DISPOSAL AND SANITARY FACILITIES SHALL BE CONSISTENTLY SEARCH SHOWN ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR. RESPONSIBILITY OF THE CONTRACTOR SHALL BE:
   A. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, AND INSTAL



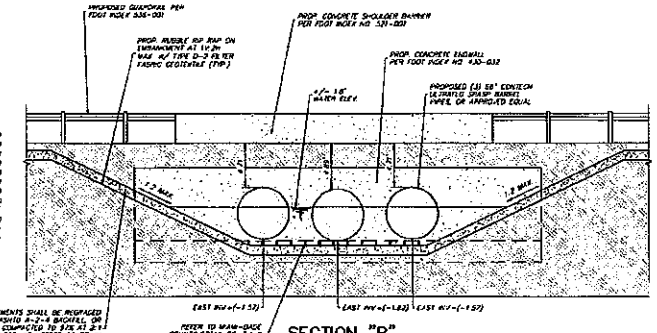
PROPOSED SITE PLAN

SCALE:1" = 10'



SECTION "A" CENTER CULVERT PIPE

SCALE:1" = 6'



SECTION "B"

SCALE:1" = 6'

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FENCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRAGE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED RIP RAP
- PROPOSED CONCRETE
- PROPOSED DETECTABLE WARNING
- PROPOSED SOD
- PROPOSED SAND CEMENT RIP RAP
- PROPOSED CHAIN LINK FENCE
- PROPOSED GUARD RAIL
- TOP OF CURB/BOTTOM OF CURB
- PROPOSED SPOT ELEVATION

NOTES

1. CONTRACTOR TO MAINTAIN DRAINAGE FLOW WITHIN THE CANAL DURING AND AFTER CONSTRUCTION.
2. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST JOINTS.
3. ALL SIDEWALKS SHALL BE 4" THICK, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK.
4. NO EXISTING TREES SHALL BE REMOVED UNLESS OTHERWISE STATED.
5. ALL PROPOSED SIDEWALK SLOPES SHALL HAVE A 2% CROSS SLOPE AND SR LONGITUDINAL SLOPE, MAXIMUM.
6. ALL SIDEWALK RAMPS AND DETECTABLE WARNINGS SHALL CONFORM TO FDOT STANDARDS.
7. ALL ASPHALT TO BE REMOVED SHALL BE SAW TO ADJACENT TO PROPOSED IMPROVEMENTS.
8. ALL UTILITIES CROSSINGS THROUGH THE CULVERT ARE ASSUMED TO BE PASSING UNDERNEATH. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONFIRM, IDENTIFY, PRESERVE, AND MAINTAIN THEM THROUGHOUT WHILE PERFORMING CONSTRUCTION.
9. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR THE NON-EXISTENCE OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MAKE AND CONFIRM ELEVATION LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO IDENTIFY, LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT DIGGING) COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL REPAIR ALL CUTS FOR THIS WORK.

* ALL SPACES ON PLANS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD-1929)

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CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PROPOSED SITE & GRADING PLAN

DRAWING HISTORY

05 07/14/22 AD
05 09/19/22 AD
05 09/08/23 AD

REVISIONS

1 DEPW COMMENTS 09/08/23 AD
2 DEPW COMMENTS 09/19/23 AD
3 DEPW COMMENTS 09/28/23 AD

APPROVALS

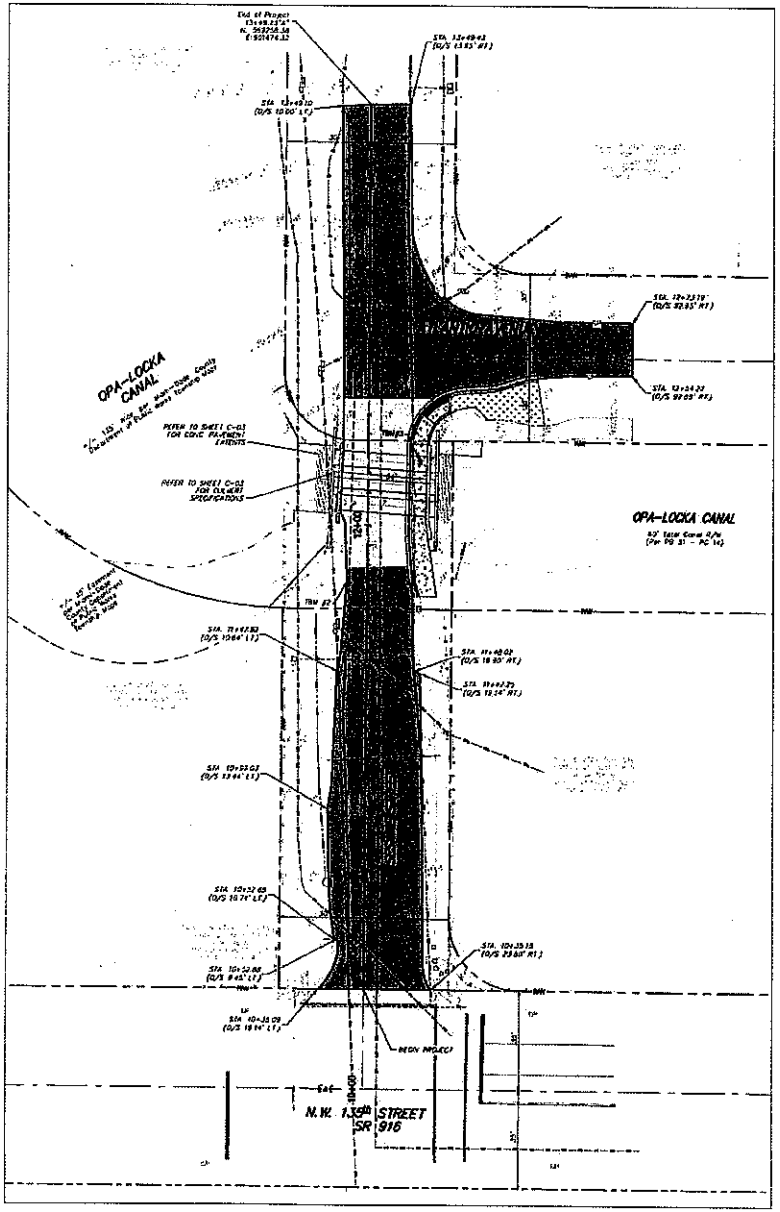
REINALDO J. RIVERA LICENSE No. 63478 STATE OF FLORIDA PROFESSIONAL ENGINEER

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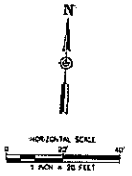
C-03

5 OF 15



PAVEMENT RESTORATION PLAN

SCALE: 1" = 20'



LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED SOD
- PROPOSED RIP RAP
- PAVEMENT RESTORATION (TYPE V (SPARC WEAR-COURSE) (1.5") OVER 36 EC ASPHALTIC CONCRETE (TYPE I MOD, SUPERPAVE 9.5 MIX) (1.5") OVER 6" LIMEROCK)

NOTES

1. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST PLAC JOINTS.
2. ALL SIDEWALKS SHALL BE 4" THICK, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK.
3. NO EXISTING USES SHALL BE REMOVED UNLESS OTHERWISE STATED
4. ALL PROPOSED SIDEWALK SLOPES SHALL HAVE A 2% CROSS SLOPE AND 3% LONGITUDINAL SLOPE, MAXIMUM
5. ALL SIDEWALK RAMPS AND DETECTABLE WARNINGS SHALL CONFORM TO FDOT STANDARDS.
6. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO PROPOSED IMPROVEMENTS.
7. ALL UTILITIES CROSSINGS THROUGH THE CULVERT ARE ASSUMED TO BE PASSING UNDERNEATH. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONFIRM, IDENTIFY, PRESERVE, AND MAINTAIN THEIR INTEGRITY WHILE PERFORMING CONSTRUCTION
8. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OF THE INCLUDED DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO ACCURATELY LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT DIGGING) COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK

RONALDO J. RIVERA, P.E. LICENSE No. 83478 STATE OF FLORIDA PROFESSIONAL ENGINEER

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CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

360 ENGINEERING

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PAVEMENT RESTORATION PLAN

DRAWING HISTORY

DS	07/24/23	AD
DS	08/16/23	AD
DS	08/28/23	AD

REVISIONS

1	DERM COMMENTS	08/09/23 AD
2	DERM COMMENTS	08/15/23 AD
3	DERM COMMENTS	09/01/23 AD

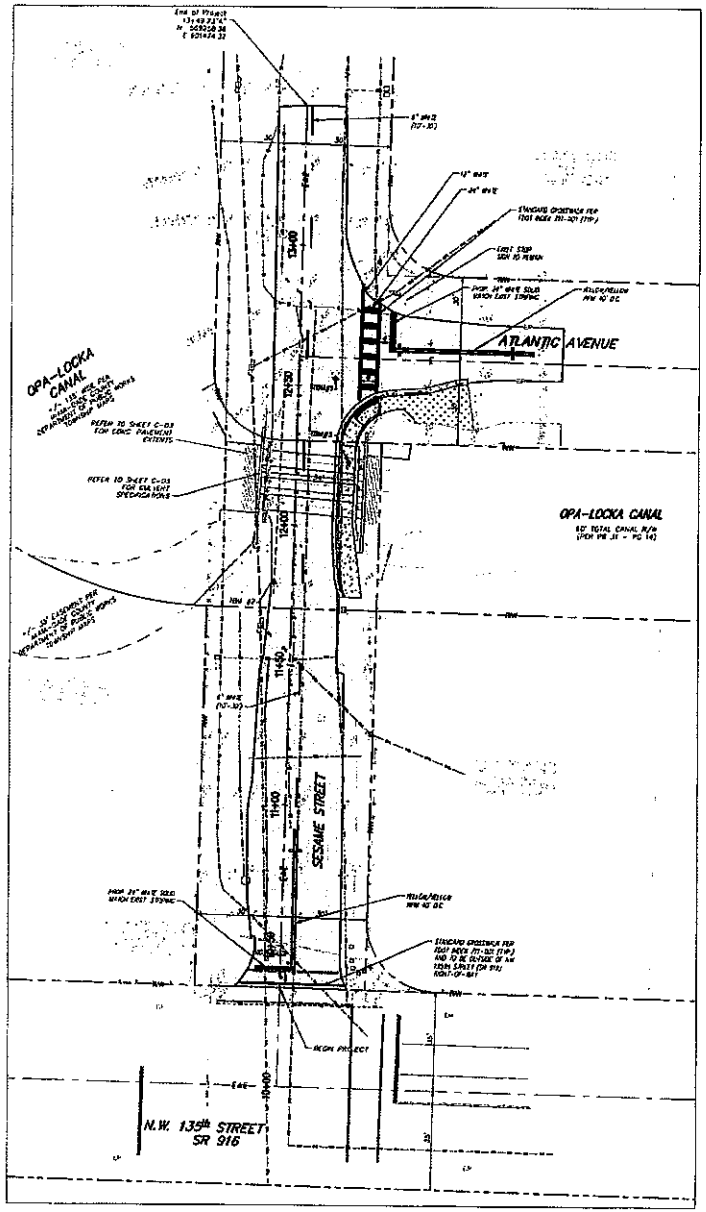
APPROVALS

DS	AD
PE	RR

	19-XXXX
	OPA-LOCKA-C-GRADING
9/1/23	AS SHOWN

C-04

6 OF 15



PROPOSED P&S PLAN
SCALE: 1:20

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED RIP RAP
- PAVEMENT RESTORATION

NOTES

1. ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND MIAMI-DADE TRAFFIC ENGINEERING STANDARDS.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PLACE MARKINGS, WHEN EITHER 14 DAY CURING PERIOD, PLACE THERMOPLASTIC PAVEMENT MARKINGS.
3. ONE BI-DIRECTIONAL YELLOW RETROREFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED AT 40-FEET INTERVALS ON EACH SIDE OF DOUBLE YELLOW STRIPES AND AT 40-FEET INTERVALS WITHIN STOP CENTERLINE MARKINGS.
4. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN IN GOOD THE BEST AVAILABLE INFORMATION THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR THE INCLUSIVENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO IDENTIFY, LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT DIGGING) COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK.

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BID SET

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

300 [illegible]

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PAVEMENT MARKING AND SIGNAGE

DRAWING HISTORY

05 05/19/23 AD
05 06/9/23 AD
05 06/09/23 AD

REVISIONS

1 DEPW COMMENTS 06/09/23 AD
2 DEPW COMMENTS 06/12/23 AD
3 DEPW COMMENTS 06/06/23 AD

APPROVALS

DATE AS
RE BE

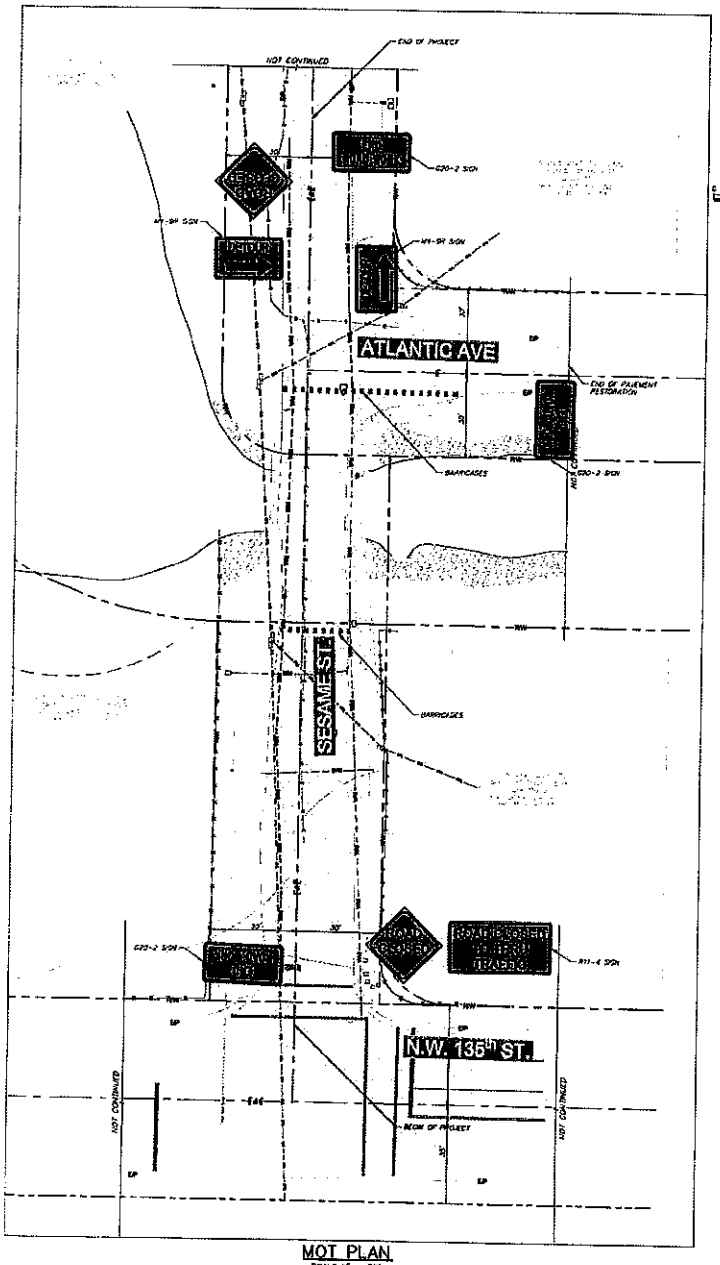
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No. 83476
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PROFESSIONAL ENGINEER

Reinaldo J. Rivera, P.E.
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(305) 733-2905

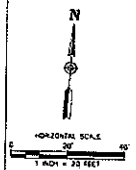
13-00298
OPA-LOCKA-C-05.DWG
5/5/23 AS SHOWN

C-05

7 OF 15



MOT PLAN
SCALE: 1" = 20'



LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
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- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- EXISTING RIP RAP

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CITY OF OPA-LOCKA, FLORIDA

300 ENGINEERING LLC

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

MOT PLAN

DRAWING HISTORY

SA 07/14/23 AD
DS 09/06/23 AD
DS 09/08/23 AD

REVISIONS

1 DDM COMMENTS 05/08/25 AD
2 DDM COMMENTS 05/13/25 AD
3 DDM COMMENTS 06/18/25 AD

APPROVALS

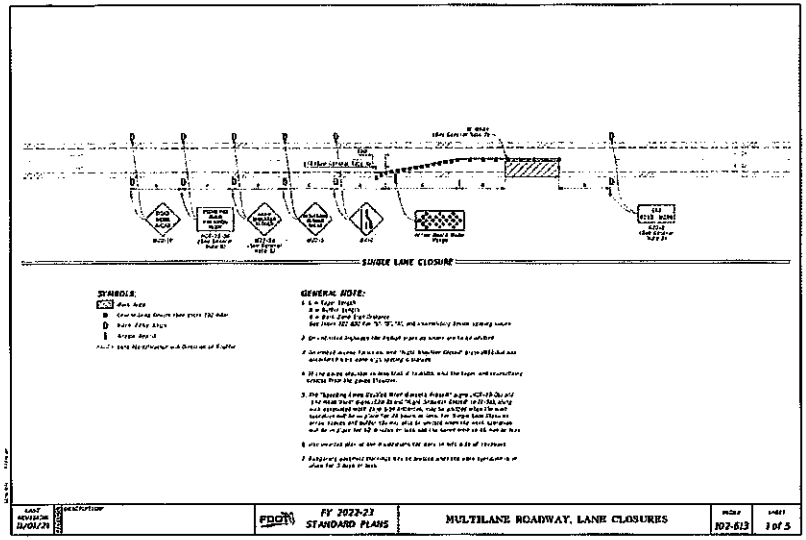
DS AD
RR RR

REINALDO J. RIVERA ATTORNEY No.63478 STATE OF FLORIDA PROFESSIONAL ENGINEER

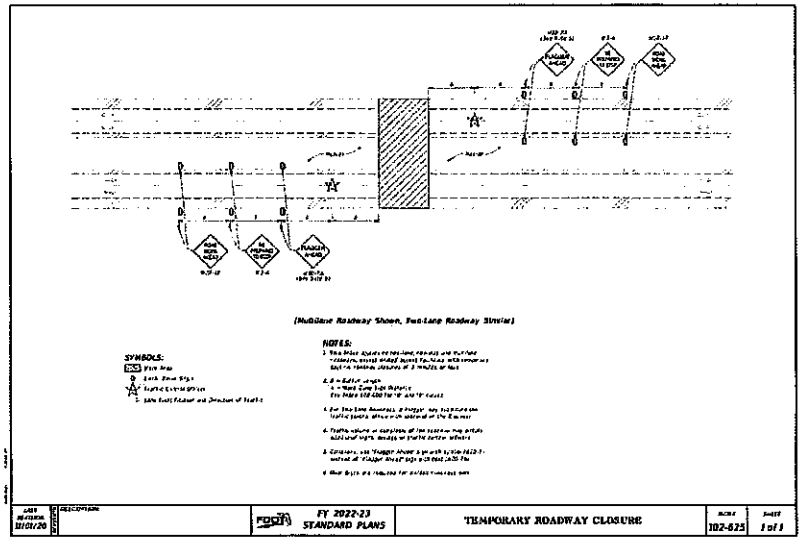
Reinaldo J. Rivera, P.E.
City Engineer
STATE OF FLORIDA - LICENSE NO. 63478
3232 PONCE DE LEON BLVD, SUITE 500
CORAL GABLES, FLORIDA 33134
(305) 753-2605

19-00000
OPA-19004-C-30145
9/8/23 AS SHOWN

SHEET
C-06
8 OF 15



LAST REVISION 01/01/20	DESCRIPTION	FDOT FY 2023-23 STANDARD PLANS	MULTILANE ROADWAY, LANE CLOSURES	INDEX 102-613	SHEET 1 of 5



LAST REVISION 01/01/20	DESCRIPTION	FDOT FY 2023-23 STANDARD PLANS	TEMPORARY ROADWAY CLOSURE	INDEX 102-625	SHEET 1 of 1

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CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

303

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

MAINTENANCE OF TRAFFIC DETAILS

DRAWING HISTORY

BS	07/01/22	AS
BS	09/01/22	AS
BS	05/08/23	AS

REVISIONS

DERM COMMENTS	05/08/23	AS
DERM COMMENTS	06/01/23	AS
DERM COMMENTS	09/08/23	AS

APPROVALS

DES	AS
RE	RR

REINALDO J. RIVERA
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(561) 753-2628

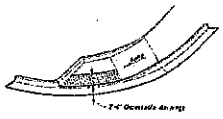
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OPA-LOCKA-C-01.DWG

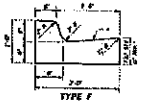
9/1/23 AS SHOWN

C-07

9 OF 15

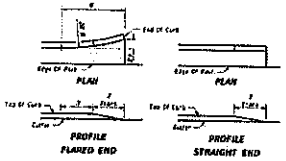


ISOMETRIC VIEW



TYPE F

CURB & GUTTER
N.T.S.



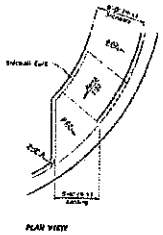
PLAN

PLAN

PROFILE
FLARED END

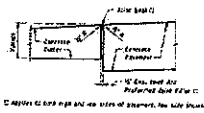
PROFILE
STRAIGHT END

CURB & GUTTER TYPES E & F
N.T.S.

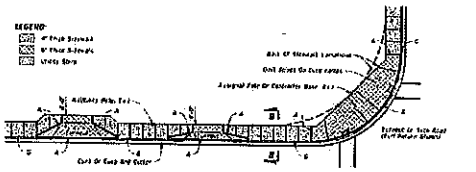


PLAN VIEW

DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS
N.T.S.



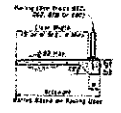
EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT
N.T.S.



PLAN

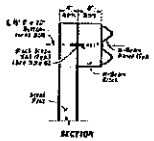


SECTION B-B



RAILING DETAIL

SIDEWALK WITHOUT UTILITY STRIP
N.T.S.



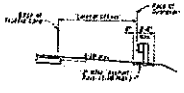
SECTION

GUARDRAIL
N.T.S.



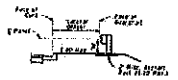
W-BEAM

GUARDRAIL TYPE – MOUNTING HEIGHTS & POST DEPTHS
N.T.S.



UNPAVED OR PARTIALLY PAVED SHOULDER

GUARDRAIL SECTION SHOULDERS
N.T.S.



BEHIND CURB
(Type F Curb Shown)

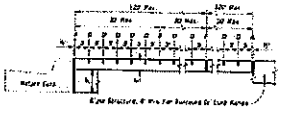
GUARDRAIL SECTION CURB & GUTTER
N.T.S.

GUARDRAIL HEIGHT SUMMARY TABLE:

Type	Min. Depth "D"	Mounting Height "H"	Post Length "L"
W-Beam Flangeless and Double Faced	2'-10"	2'-1"	6'-6"



OPEN JOINTS



SAWED JOINTS

LONGITUDINAL SECTION

LEGEND:

SIDEWALK JOINTS
N.T.S.

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CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

309

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

STANDARD DETAILS

DRAWING HISTORY

DS 07/19/23 AS
DS 08/18/23 AS
DS 09/06/23 AS

REVISIONS

1 DOW COMMENTS 08/09/23 AS
2 DOW COMMENTS 09/15/23 AS
3 DOW COMMENTS 09/20/23 AS

APPROVALS

DS AS
PE PE

RONALDO J. RIVERA
LICENSE
No. 83478
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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STATE OF FLORIDA - LICENSE NO. 83478
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(561) 758-2655

19-0268

OPA-LOCKA-C-19016

9/8/23 AS SHOWN

C-08

10 OF 15

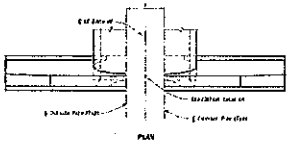
BID SET

GENERAL NOTES:

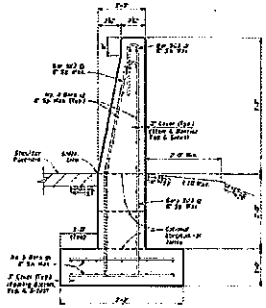
1. Use Class III concrete.
2. Reinforcing steel is either Grade 40 or 60.
3. Endwalls may be cast in place or precast concrete. Contractor has option of using precast endwalls unless noted as cast-in-place on the Summary of Pay Items.
4. Dimension 'A' applies when skew is zero degrees.
5. Dimensions, thickness, and reinforcing are for round and elliptical concrete pipe and for round and elliptical corrugated metal pipe. Reinforcing for arch pipe may vary.
6. For skews other than zero degrees (skew other than 0 to 5 degrees, inclusive, from the square to the flow line), add 2 inches to dimension 'B' for each 15 degrees of skew.
7. For pipe sizes, shapes and pipe material not shown, dimensions and reinforcing are similar to the next smaller pipe shown.
8. Dimensions shown are for minimum required pipe cover.

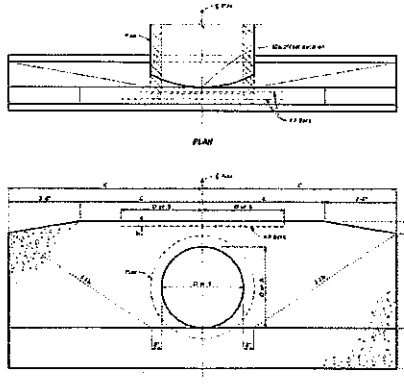
ROUND CONCRETE AND CORRUGATED METAL PIPE

Pipe Size D	Capacity Area (ft²) Concrete Pipe	Capacity Area (ft²) Corrugated Metal Pipe	Dimensions A	B	C	E	G	H	Concrete Pipe Endwall Quantities (Cost for Concrete Only) Number of Ft. and Inch Diameter of Pipe	Concrete Pipe Endwall Quantities (Cost for Concrete Only) Concrete (C.Y.)	Concrete Pipe Endwall Quantities (Cost for Concrete Only) Reinforcing Steel (Lbs.)	Corrugated Metal Pipe Endwall Quantities (Cost for Concrete Only) Number of Ft. and Inch Diameter of Pipe	Corrugated Metal Pipe Endwall Quantities (Cost for Concrete Only) Concrete (C.Y.)	Corrugated Metal Pipe Endwall Quantities (Cost for Concrete Only) Reinforcing Steel (Lbs.)	Pipe Size D
18"	1.77	1.77	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	18"
24"	3.14	3.14	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	24"
30"	4.91	4.91	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	30"
36"	7.07	7.07	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	36"
42"	9.62	9.62	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	42"
48"	12.57	12.57	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	48"
54"	15.90	15.90	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	54"
60"	19.63	19.63	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	60"
66"	23.76	23.76	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	66"
72"	28.27	28.27	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1	0.2	20	1	0.2	20	72"



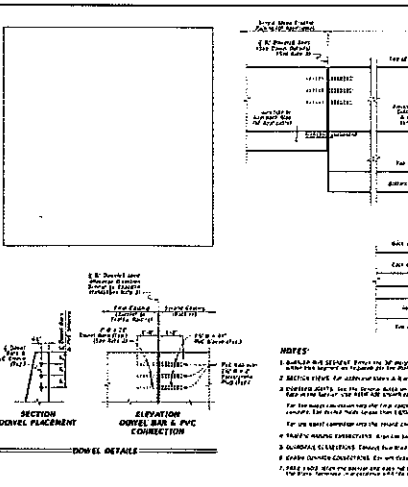
NORMAL PIPE





CONCRETE ENDWALL DETAILS

Last Revised	Description	FDOT	FY 2022-23 STANDARD PLANS	STRAIGHT CONCRETE ENDWALLS SINGLE AND MULTIPLE PIPE	Index	Sheet
11/01/19					430-030	2 of 4



DOWEL DETAILS

NOTES:

1. Install 4 inch SEPARATOR STRIP for 36" SHAPE SINGLE SLOPE or other type of the Authority Approved Barrier wherever shown throughout the Project limits as shown on the Plans.
2. MEDIAN USAGE. For additional notes & Sheet 13 of Sheet 14.
3. EXPANSION JOINTS. See the Typical Notes on Sheet 1 for details of joint types. Joint width may vary with angle of skew adjacent to the joint and at the Contractor's option shall be 3/4 inch or 1 inch for all skews.

   For the typical expansion joint for curbing and barrier wall, the Contractor may at his option use the joint material for the expansion joint in the curbing. The Contractor shall submit to the Engineer of Record for approval the joint material he proposes to use. Approval shall be required before any joint material will be installed.

   For the typical expansion joint for traffic railing, use a 1/2" thick Sponge Rubber Pad, conforming to ASTM D1752, Type II, Grade 2, or equal.
4. TRAFFIC RAILING CONSTRUCTION. Construct Traffic Railing in accordance with Sheet 13 of Sheet 14.
5. BARRIER TRANSITION CONSTRUCTION. For all Barrier Transitions shown on Sheet 13 of Sheet 14, the Contractor has the option of using either Concrete or Steel Railing.
6. PIPE CULVERT, SLOPE PAVEMENT AND END TREATMENT. Construct Pipe Culvert, Slope Pavement, Barrier Wall Transition and End Treatment in accordance with the details shown on Sheet 15 of Sheet 14.

SHOULDER BARRIER

Last Revised	Description	FDOT	FY 2022-23 STANDARD PLANS	CONCRETE BARRIER	Index	Sheet
07/01/20					521-001	13 of 36

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BID SET

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

STANDARD DETAILS

DRAWING HISTORY

DS 07/14/23 AD
DS 08/18/23 AD
DS 09/09/23 AD

REVISIONS

1 DEPM COMMENTS 09/09/23 AD
2 DEPM COMMENTS 08/15/23 AD
3 DEPM COMMENTS 09/08/23 AD

APPROVALS

RONALDO J. RIVEIRA LICENSE No. 83478 STATE OF FLORIDA PROFESSIONAL ENGINEER

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(305) 753-2605

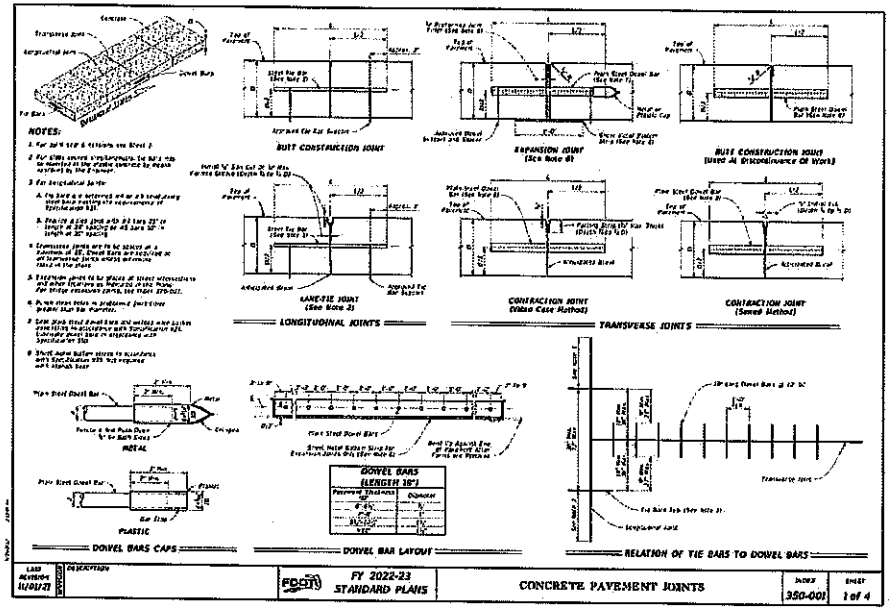
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OPA-LOCKA-C-09.DWG

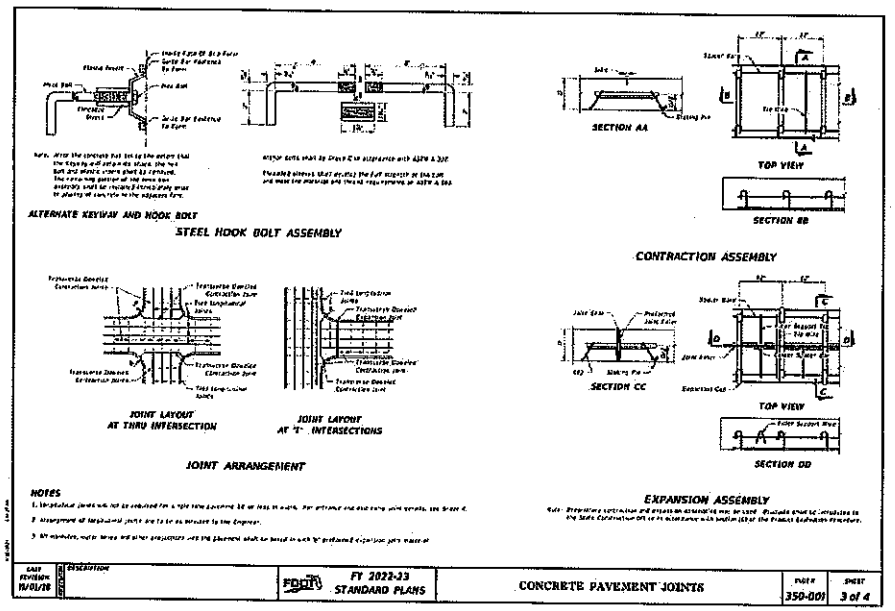
9/1/23 AS SHOWN

C-09

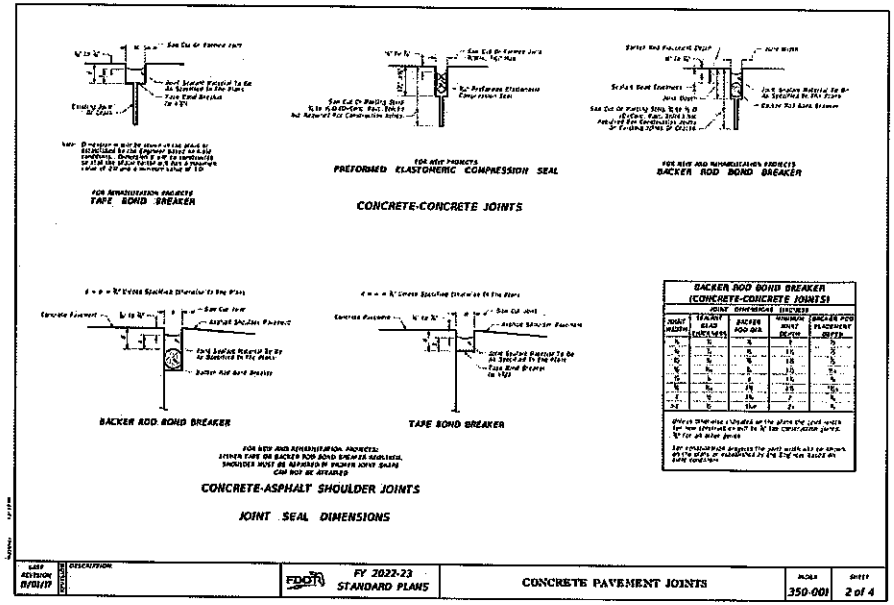
11 OF 15



LAST REVISION 11/01/17	DESCRIPTION	FDOT FY 2022-23 STANDARD PLANS	CONCRETE PAVEMENT JOINTS	INDEX 350-001	SHEET 1 of 4



LAST REVISION 11/01/17	DESCRIPTION	FDOT FY 2022-23 STANDARD PLANS	CONCRETE PAVEMENT JOINTS	INDEX 350-001	SHEET 3 of 4



LAST REVISION 11/01/17	DESCRIPTION	FDOT FY 2022-23 STANDARD PLANS	CONCRETE PAVEMENT JOINTS	INDEX 350-001	SHEET 2 of 4

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

300

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

STANDARD DETAILS

DRAWING HISTORY

DS 07/14/23 RD
DS 08/14/23 RD
DS 09/08/23 RD

REVISIONS

DEPW COMMENTS 05/09/23 RD
DEPW COMMENTS 08/15/23 RD
DEPW COMMENTS 09/08/23 RD

APPROVALS

GS RD
RE ID

RONALDO J. RIVERA
LICENSE
No. 83478
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Ronaldo J. Rivera, P.E.
Civil Engineer
STATE OF FLORIDA - LICENSE NO. 83478
3222 PONCE DE LEON BLVD. SUITE 330
CORAL GABLES, FLORIDA 33134
(305) 753-2909

19-3056

OPA-LOCKA-C-0010

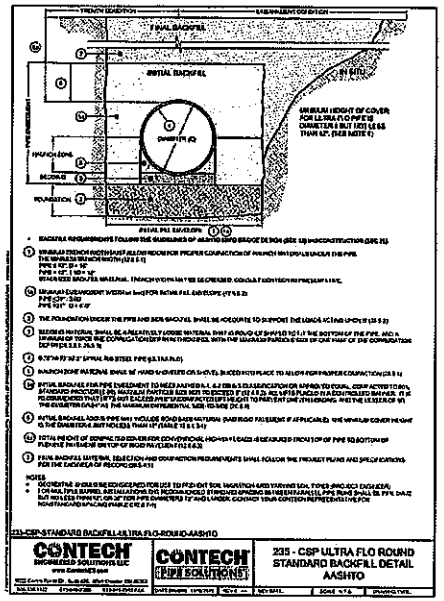
9/2023 AS SHOWN

C-10

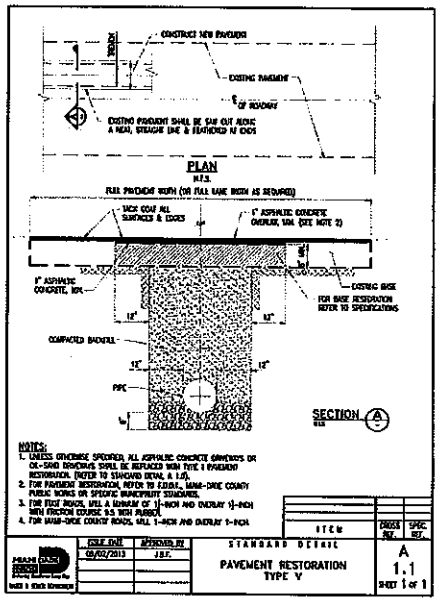
12 OF 15

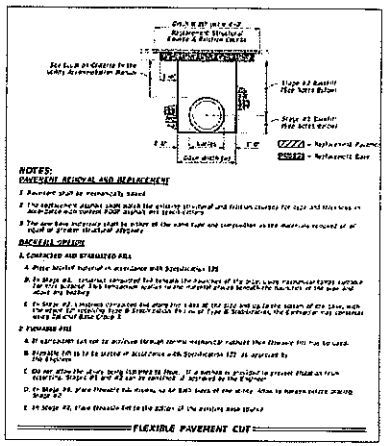
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RONALDO RIVERA, PE, ON DATE.
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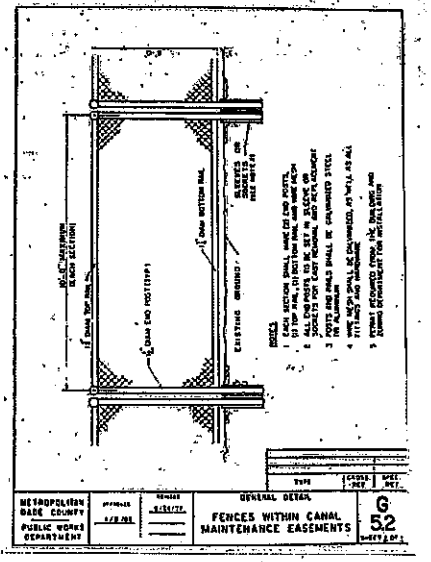
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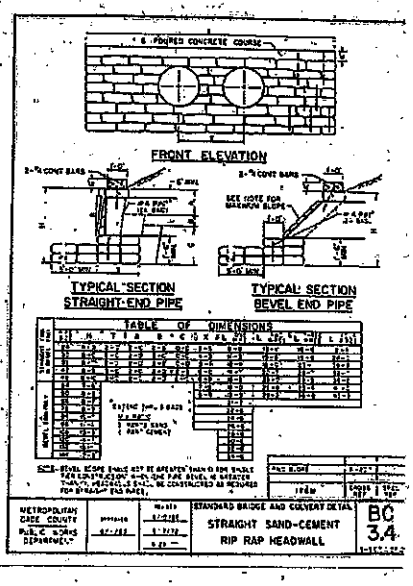


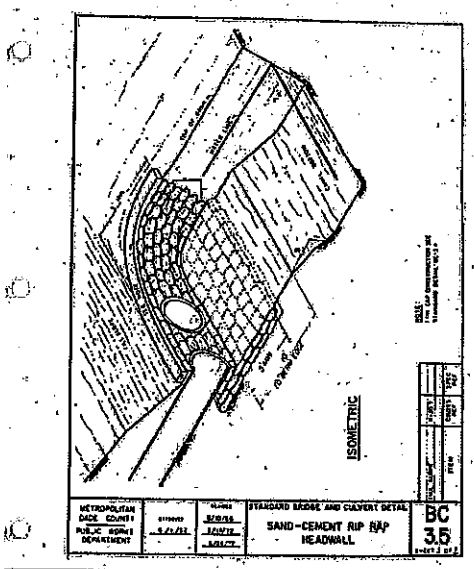
OR APPROVED EQUAL











REINALDO J. RIVERA, P.E.
LICENSE No. 83476
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Reinaldo J. Rivera, P.E.
Civil Engineer
STATE OF FLORIDA - LICENSE NO 83476
2222 PONCE DE LEON BLVD, SUITE 300
CORAL GABLES, FLORIDA 33134
(305) 793-3465

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BID SET

CITY OF CORAL GABLES, FLORIDA
INCORPORATED 1925

309

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

STANDARD DETAILS

DRAWING HISTORY

DS 07/14/23 AD
DS 08/16/23 AD
DS 08/28/23 AD

REVISIONS

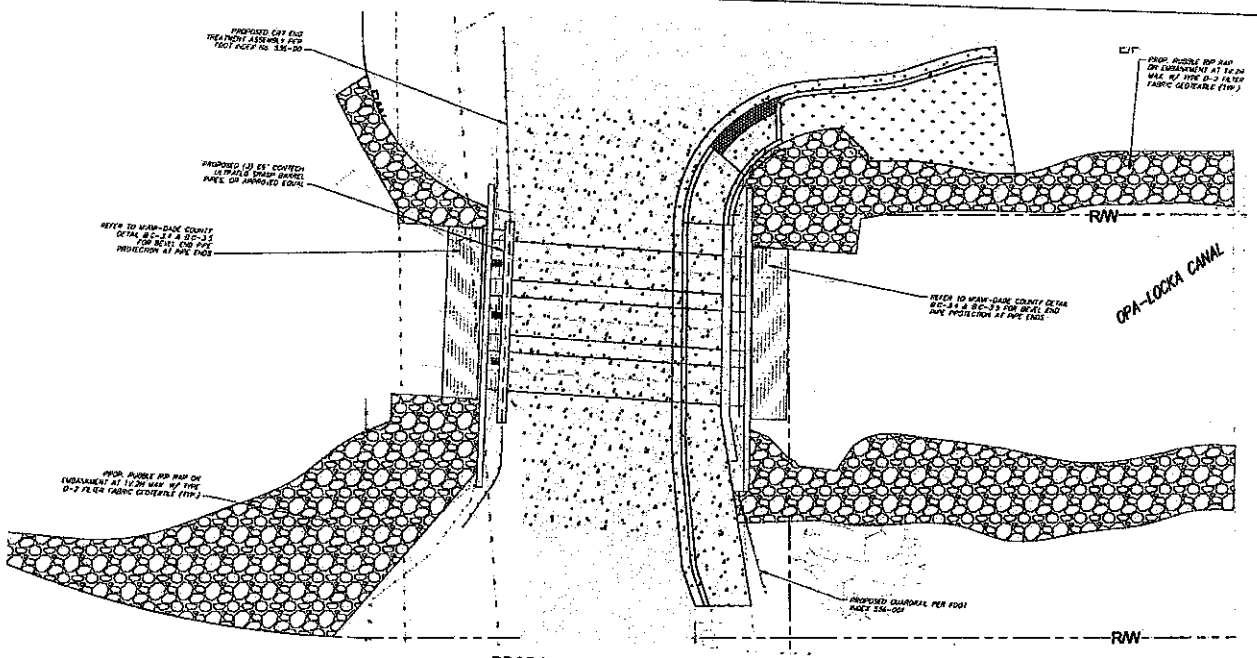
DEPW COMMENTS 08/28/23 AD
DEPW COMMENTS 08/23/23 AD
DEPW COMMENTS 07/28/23 AD

APPROVALS

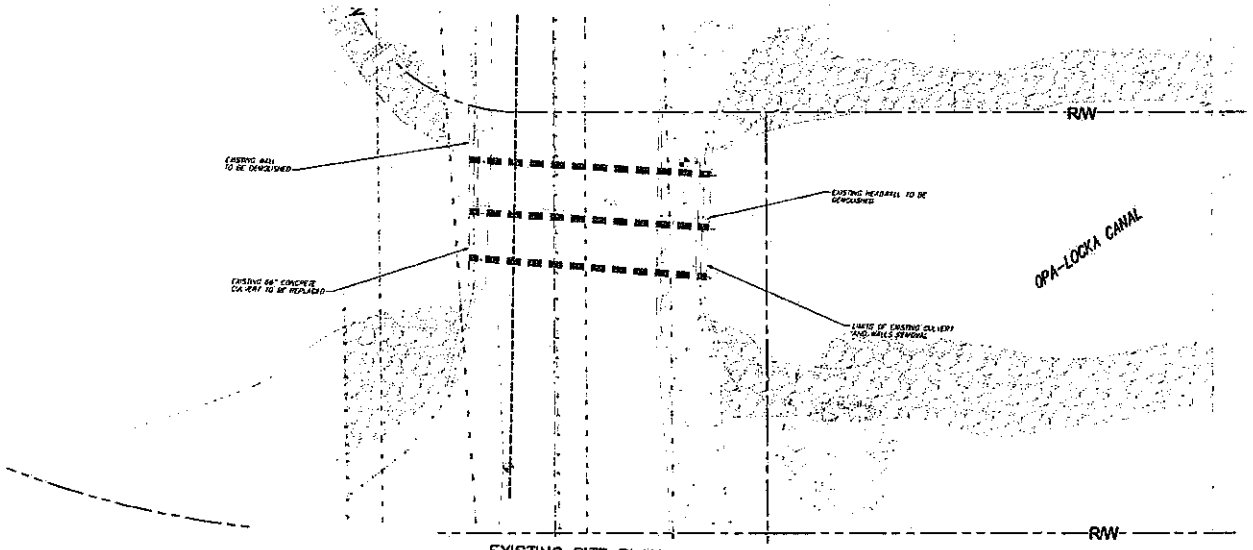
DS AD
PE SR

C-11

13 OF 15



PROPOSED SITE PLAN
SCALE: 1-1/2" = 1'-0"



EXISTING SITE PLAN
SCALE: 1-1/2" = 1'-0"

BID SET

N

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRATE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- EXISTING R/W MAP
- PROPOSED RUBBLE RIP-RAP
- PROPOSED CONCRETE
- PROPOSED SAND-CEMENT RIP-RAP
- PROPOSED GUARD RAIL

NOTES

1. PROPOSED CULVERT PIPE SHALL BE ADEQUATE FOR AASHTO HS-20 SIDE LOAD UNDER A 2' DEPTH OF FILL
2. CONTRACTOR SHALL INSTALL CULVERT PER MANUFACTURER'S RECOMMENDATIONS
3. CONTRACTOR SHALL PROVIDE PIPE CULVERT SHOP DRAWINGS FOR APPROVAL BY THE EOR PRIOR TO INSTALLATION

Digitally signed by Oscar J Cruz
DN: c=US, o=Chronis Engineering Inc., dnQualifier=A01410D000001EBBE6503B0010D7CF, cn=Oscar J Cruz
Date: 2023.09.08 17:37:00 -04'00'

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S.S.O.C.O.F. DESIGN TICKET No. 342105404-009

CITY OF OPA-LOCKA, FLORIDA

CHRONIS ENGINEERING, INC

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PIPE CULVERT STRUCTURAL DETAILS (1 OF 2)

DRAWING HISTORY

05	07/19/23	OC
06	08/16/23	OC
08	11/13/23	OC

REVISIONS

1	DERM COMMENTS	08/09/23 OC
2	DERM COMMENTS	08/16/23 OC

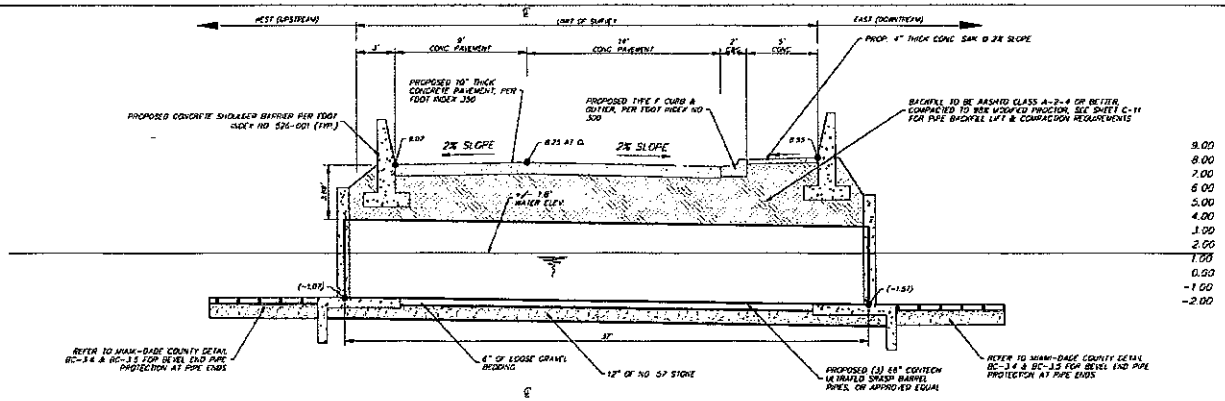
APPROVALS

OC
OC
OC
OC

OSCAR J. CRUZ
No. 63869
STATE OF FLORIDA
PROFESSIONAL ENGINEER

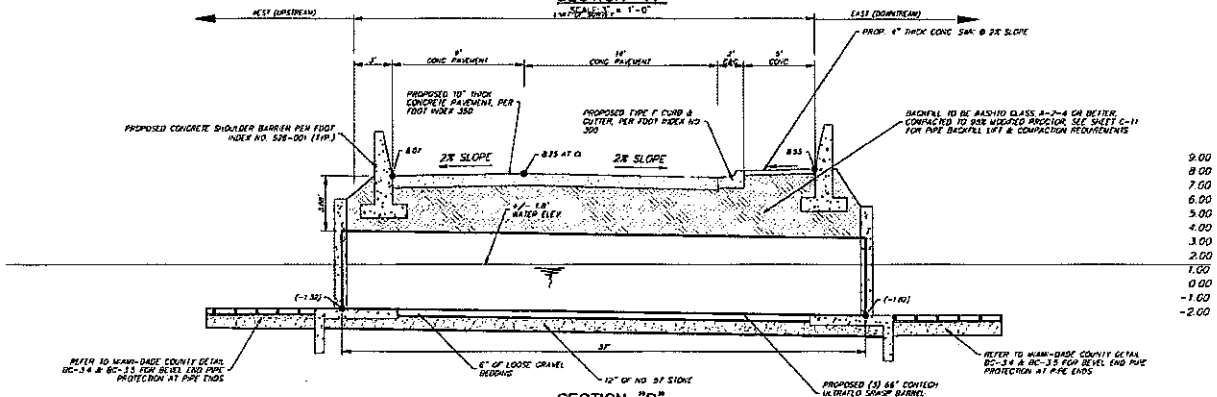
Oscar J. Cruz, P.E.
Civil Engineer
STATE OF FLORIDA - LICENSE NO. 63869
7450 SW 88th STREET, SUITE 205
MIAMI, FLORIDA 33156
(305) 432-4626

18-0006	
OPA-LOCKA-S-01.DWG	
08/16/2023	AS SHOWN
S-01	
14 OF 15	



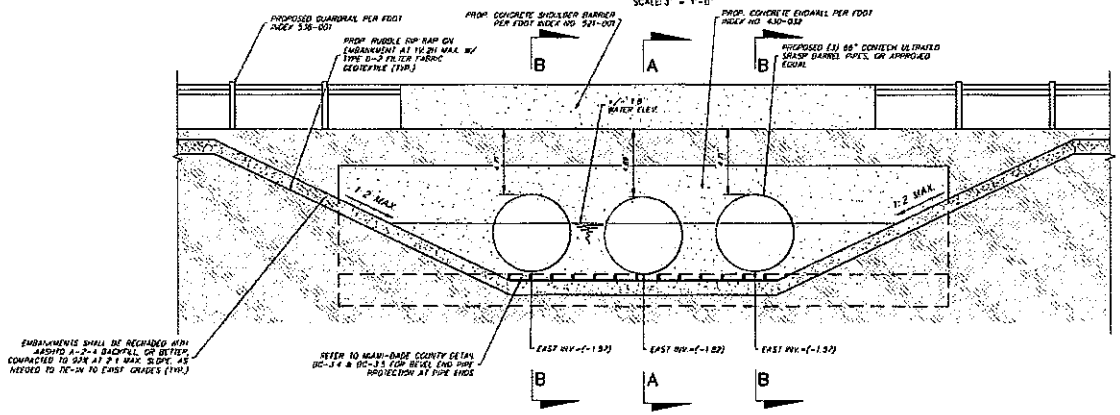
SECTION "A"

SCALE: 3" = 1'-0"



SECTION "B"

SCALE: 3" = 1'-0"



PROPOSED ELEVATION

SCALE: 3" = 1'-0"

NOTES

1. PROPOSED CULVERT PIPE SHALL BE ADEQUATE FOR AASHTO HS-20 LIVE LOAD UNDER A 2' DEPTH OF FILL.
2. CONTRACTOR SHALL INSTALL CULVERT PER MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR SHALL PROVIDE PIPE CULVERT SHOP DRAWINGS FOR APPROVAL BY THE EOR PRIOR TO INSTALLATION.

Digitally signed by Oscar J Cruz
DN: c=US, o=Chrome Engineering Inc., dnQualifier=A01410D000001885BE66D28010D7CF, cn=Oscar J Cruz
Date: 2023.09.08 17:37:25 -04'00'

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S.S.O.C.O.F. DESIGN TICKET No.342105404-000

BID SET

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

CHROME ENGINEERING, INC.

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PIPE CULVERT STRUCTURAL DETAILS (2 OF 2)

DRAWING HISTORY

05	07/14/22	OC
05	08/15/23	OC
05	09/10/23	OC

REVISIONS

1	DERM COMMENTS	08/08/23 OC
2	DERM COMMENTS	08/16/23 OC

APPROVALS

OC	OC
EC	QC

Oscar J. Cruz, P.E.
Civil Engineer
STATE OF FLORIDA - LICENSE NO. 83809
19485 SW 89 AVENUE, SUITE 203
MIAMI, FLORIDA 33196
(305) 972-6821

19-03095

OPA-LOCK-S-01DWG

08/11/2023 AS SHOWN

S-02

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01700 PROJECT CLOSEOUT

01710 CLEANING

01711 FINAL ACCEPTANCE

01720 PROJECT RECORD DOCUMENTS

01725 AS-BUILT DRAWINGS

01730 OPERATING AND MAINTENANCE INSTRUCTIONS

01740 PERMITS

01750 MAINTENANCE OF TRAFFIC AND PUBLIC STREETS

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02526 CONCRETE PAVEMENT, CURB AND WALKWAYS

02630 OUTFALL ENDWALL

02641 PIPE CULVERTS

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02765 PAVEMENT MARKINGS AND TRAFFIC SIGNS

02840 CONCRETE BARRIER

02900 LANDSCAPING

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03300 CAST-IN-PLACE CONCRETE, REINFORCING AND FORMWORK

03360 GROUT

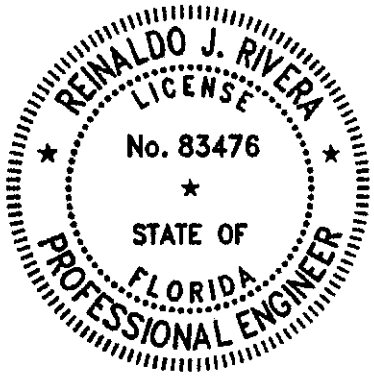
03400 PRECAST PRESTRESSED CONCRETE

DIVISION 4 – (NOT USED)

DIVISION 5 – METALS

05550 ALUMINUM RAILING

DIVISION 6 TO 16 – (NOT USED)



CITY OF OPA-LOCKA REQUEST FOR PROPOSALS RFP
NO: 23-1016200
SESAME STREET CULVERT REPLACEMENT

Sealed proposal for SESAME STREET CULVERT REPLACEMENT for the City of Opa-locka will be received by the City's Clerk Office, 780 Fisherman St, 4th Floor, Opa-locka, Florida 33054, **Monday, October 16, 2023, by 2:00pm EST.** Any RFP Package received after the designated closing time will be returned unopened. The OCRA will be accepting proposals by mail, however it is your responsibility to submit your proposal by the due date. In addition, proposal may be submitted via www.demandstar.com (e-bid) by 2:00pm.

The address to submit sealed proposal is listed below:

CITY OF OPA-LOCKA
Office of the City Clerk
780 Fisherman Street, 4th Floor Opa-locka,
Florida 33054

An original and six (6) copies for a total of seven (7) plus 1 copy of the Proposal package on USB Flash Drive in PDF format shall be submitted in sealed envelopes/packages addressed to the City Clerk, City of Opa-locka, Florida, and marked **RFP for SESAME STREET CULVERT REPLACEMENT.**

Proposers desiring information for use in preparing proposals may obtain a set of such documents by visiting the City's website at www.opalockafl.gov or www.demandstar.com.

The City reserves the right to accept or reject any and all proposals and to waive any technicalities or irregularities therein. The City further reserves the right to award the contract to that proposer whose proposal best complies with the **RFP NO: 23-1016200** requirements. Proposers may not withdraw their proposal for a period of ninety (90) days from the date set for the opening thereof.

A pre-bid meeting will be held on **Wednesday, September 27, 2023 at 2:30 p.m.** at 780 Fisherman Street, 4th Floor, Opa-locka, FL 33054 and via Microsoft Teams.

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting
Meeting ID: 279 204 897 403
Passcode: v7ASXu
Download Teams | Join on the web Learn More | Meeting options

Joanna Flores, CMC City
Clerk

CITY OF OPA-LOCKA
REQUEST FOR PROPOSALS RFP NO: 23-1016200
SESAME STREET CULVERT REPLACEMENT

PROPOSAL GUIDELINES

1-1. Introduction: The City of Opa-locka seeks proposals for SESAME STREET CULVERT REPLACEMENT. The City is soliciting bids on behalf of the City Manager's Office for SESAME STREET CULVERT REPLACEMENT under the laws of the State of Florida. These services must be efficient and economical, adhere to industry standards and best practices, and utilize the latest nonproprietary technology. The Contract will be awarded to the highest ranked Proposer, as described in the Evaluation Procedures Section below.

1-2. Proposal Submission and Withdrawal: The City of Opa-locka will be accepting proposals by mail, however it is Proposer's responsibility to submit Proposer's proposal by the due date. In addition, proposals may be submitted via www.demandstar.com (e-bid). The City must receive all proposals by 2:00 p.m. on tba, 2023. The address to submit sealed proposals is listed below:

CITY OF OPA-LOCKA Office of the City Clerk
780 Fisherman Street, 4th Floor Opa-locka,
Florida 33054

To facilitate processing, please clearly mark the outside of the proposal package as follows: RFP NO. 23-1016200 – SESAME STREET CULVERT REPLACEMENT. This package shall also include the Proposer's return address.

Proposers may withdraw their proposals by notifying the City in writing at any time prior to the deadline for proposal submittal. After the deadline, the proposal will constitute an irrevocable offer, for a period of 90 days. Once opened, proposals become a record of the City and will not be returned to the Proposer.

The City cautions Proposers to assure actual delivery of mailed or hand-delivered proposals directly to the City Clerk's Office at 780 Fisherman Street, 4th Floor, Opa-locka, Florida 33054 prior to the deadline set for receiving proposals. Telephone confirmation of timely receipt of the proposal may be made by calling (305) 688-4611 before proposal closing time. Any proposal received after the established deadline will not be considered and will be returned unopened to the Proposer(s).

1-3. Number of Copies: Proposers shall submit an original and six (6) copies (a total of 7) plus one copy on USB flash drive in PDF format of the proposal in a sealed, opaque package marked as noted above. The Proposer will be responsible for timely delivery, whether by personal delivery, US Mail or any other delivery medium.

1-4. Development Costs: Neither the City nor its representatives shall be liable for any expenses incurred in connection with preparation of a response to this Request for Proposal. Proposers should prepare their proposals

simply and economically, providing a straightforward and concise description of the Proposer's ability to meet the requirements of the RFP.

1-5. Inquiries: The City Clerk will receive written requests for clarification concerning the meaning or interpretations of the RFP, until eight (8) days prior to the submittal date. City personnel are authorized only to direct the attention of prospective Proposers to various portions of the RFP so that they may read and interpret such for themselves. No employee of the City is authorized to interpret any portion of this RFP or give information as to the requirements of the RFP in addition to what is contained in the written RFP document.

1-6. Addendum: The City may record its response to inquiries and any supplemental instructions in the form of written addenda. The City may mail written addenda up to three (3) calendar days before the date fixed for receiving the proposals. Proposers shall contact the City to ascertain whether any addenda have been issued. Failure to do so could result in an unresponsive proposal. Any oral explanation given before the RFP opening will not be binding.

All Proposers are expected to carefully examine the proposal documents. Any ambiguities or inconsistencies should be brought to the attention of the City's Purchasing Agent through written communication prior to the opening of the proposals.

1-7. Contract Awards: The City anticipates entering into an Agreement with the Proposer who submits the proposal judged by the City to be most advantageous. The Proposer understands that this RFP does not constitute an offer or an Agreement with the Proposer. An offer or Agreement shall not be deemed to exist and is not binding until proposals are reviewed, accepted by appointed staff, the best proposal has been identified, approved by the appropriate level of authority within the City and executed by all parties. The City anticipates that the final Agreement will be in substantial conformance with this sample Agreement; nevertheless, Proposers are advised that any Agreement may result from the RFP may deviate from the Sample Agreement. The City reserves the right to reject all proposals, to abandon the project and/or to solicit and re- advertise for other proposals.

1-8. Contractual Agreement: This RFP and Consultant/Contractor proposal shall be included and incorporated in the final award. The order of contractual precedence will be the Contract or Agreement document, original Terms and Conditions, and Proposer response. Any and all legal action necessary to enforce the award will be held in Miami-Dade County and the contractual obligations will be interpreted according to the laws of Florida. Any additional contract or agreement requested for consideration by the Proposer must be attached and enclosed as part of the proposal.

1-9. Selection Process: The proposals will be evaluated and assigned points. The firm with the highest number of points will be ranked first; however, nothing herein will prevent the City from assigning work to any firm deemed responsive and responsible.

The City reserves the right to further negotiate any proposal, including price, with the highest rated Proposer. If an agreement cannot be reached with the highest rated Proposer, the City reserves the right to negotiate and recommend award to the next highest Proposer or subsequent Proposers until an agreement is reached.

1-10. Public Records: Upon award recommendation or ten (10) days after opening, whichever occurs first, proposals become "public records" and shall be subject to public disclosure consistent with Chapter 119 Florida Statutes. Proposers must invoke the exemptions to disclosure provided by law in the response to the RFP, and must identify the data or other materials to be protected, and must state the reasons why such exclusion from public disclosure is necessary. Document files may be examined, during normal working hours.

1-11. News Releases: The Proposer shall obtain the prior approval of the City Manager's Office for all news releases or other publicity pertaining to this RFP or the service, study or project to which it relates.

1-12. Insurance: The awarded Proposer(s) shall maintain insurance coverage reflecting at least the minimum amounts and conditions specified herein. In the event the Proposer is a governmental entity or a self-insured organization, different insurance requirements may apply. Misrepresentation of any material fact, whether intentional or not, regarding the Proposers' insurance coverage, policies or capabilities may be grounds for rejection of the proposal and rescission of any ensuing Agreement.

1. Evidence of General Liability coverage with limits not less than $1,000,000 per Occurrence/ $2,000,000 Aggregate (Including Policy Number and Policy Period);

2. Evidence of Auto Liability coverage with limits not less than $1,000,000 per Occurrence/$1,000,000 Aggregate (Including Policy Number and Policy Period);

3. Evidence of Workers' Compensation coverage with statutory limits and Employer's Liability coverage with limits not less than $100,000 (Including Policy Number and Policy Period);

4. The City listed as an additional insured (this may be specifically limited to the specific job(s) the contractor will be performing);

5. Minimum 30-day written notice of cancellation.

1-13. Licenses: Proposers, both corporate and individual, must be fully licensed and certified in the State of Florida at the time of RFP submittal. The proposal of any Proposer who is not fully licensed and certified shall be rejected.

1-14. Public Entity Crimes: Award will not be made to any person or affiliate identified on the Department of Management Services' "Convicted Vendor List". This list is defined as consisting of persons and affiliates who are disqualified from public contracting and purchasing processes because they have been found guilty of a public entity crime. No public entity shall award any contract to or transact any business in excess of the threshold amount provided in Section 287.017 Florida Statutes for Category Two (currently $25,000) with any person or affiliated on the "Convicted Vendor List" for a period of thirty-six (36) months from the date that person or affiliate was placed on the "Convicted Vendor List" unless that person or affiliate has been removed from the list. By signing and submitting the RFP proposal forms, Proposer attests that they have not been placed on the "Convicted Vendor List".

1-15. Code Of Ethics: If any Proposer violates or is a party to a violation of the code of ethics of the City of Opalocka or the State of Florida with respect to this proposal, such Proposer may be disqualified from performing the work described in this proposal or from furnishing the goods or services for which the proposal is submitted and shall be further disqualified from submitting any future proposals for work, goods or services for the City of Opalocka.

1-16. Drug-Free Workplace: Preference shall be given to businesses with Drug-Free Workplace (DFW) programs. Whenever two or more proposals which are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a proposal received from a business that completes the attached DFW form certifying that it is a DFW shall be given preference in the award process.

1-17. Permits and Taxes: The Proposer shall procure all permits, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

1-18. Protests: Protests of the plans, specifications, and other requirements of the request for proposal and bids must be received in writing by the City Clerk's Office at least ten (10) working days prior to the scheduled bid opening. A detailed explanation of the reason for the protest must be included. Protests of the award or intended

award of the bid or contract must be in writing and received in the City Clerk's Office within seven (7) working days of the notice of award. A detailed explanation of the protest must be included.

1-19. Termination for Convenience: A contract may be terminated in whole or in part by the City at any time and for any reason in accordance with this clause whenever the City shall determine that such termination is in the best interest of the City. Any such termination shall be affected by the delivery to the contractor at least five (5) working days before the effective date of a Notice of Termination specifying the extent to which performance shall be terminated and the date upon which termination becomes effective. An equitable adjustment in the contract price shall be made for the completed service, but no amount shall be allowed for anticipated profit on unperformed services.

CALENDAR EVENTS

EVENT	**DATE/LOCATION**	
Release Date	9/17/23	
Pre-Bid Meeting	9/27/23	
Written Questions Due	10/6/23 @ 5:00pm Email questions to jbergel@opalockafl.gov With Subject line "RFP No: Bid Questions"	
Response to Questions	10/10/23 @ 5:00pm	
Due Date/Bid Opening	10/16/23 @ 2:00 pm	at: City of Opa-locka Clerk Office 780 Fisherman Street, 4th Floor Opa-locka, Florida 33054 OR Electronic Bid on www.Demandstar.com

PHASE 1: 1st Evaluation Committee Meeting (Open to the Public).	TBA
Award Letter Recommendation	TBA
Post Award	TBA

GENERAL CONDITIONS

1.0 PERFORMANCE OF WORK: The Contractor shall supply all labor, transportation, materials, machinery, tools, apparatus, and equipment necessary for the entire proper and substantial completion of his work, and be accountable for the safe, proper and reasonable construction, maintenance and use of the same during construction, and shall remove all construction equipment upon completion, and shall perform all work in the best and most workmanlike manner. Special care shall be taken by the Contractor in placing and removing stockpiles of material, and in the work in general to avoid unnecessary injury to either public property or other areas adjacent to the work.

2.0 CONCURRENT WORK: Work may be performed concurrently by the utilities in the City or the City's Contractor in the right-of-way and it shall be the responsibility of the Contractor to coordinate his work with the utility companies, the City and the City's Contractors.

3.0 USE OF PUBLIC STREETS: Construction shall be performed in such a manner as to provide a minimum of inconvenience to the residents of the area. Any other excavated material spilled from trucks shall be removed by the Contractor and the streets shall be cleaned twice daily to the satisfaction of the Public Works Director.

4.0 EXISTING UTILITIES AND STRUCTURES: It will be the Contractor's responsibility to exercise all caution in the vicinity of any utility. The Contractor shall be fully responsible for, and make good all damages to buildings, telephone or other cables, sewers, water pipes, pavement, driveways, walls, sprinkler systems, survey markers, or other structures which may be encountered whether or not shown on the plans. The Contractor shall have a utility check performed prior to any construction.

4.1 The locations of existing utilities have been prepared using the best information available however, the information is not guaranteed. The Contractor shall be responsible for determining the location, character and depth of all utilities. The Contractor shall be responsible for and make good all damages to all pavement structures and utilities which may be encountered whether or not shown on the plans. The cost of restoration shall be included in the unit price stated in the proposal for the related work. No extras for restoration will be allowed.

4.2 The Contractor shall protect from damage all utilities, structures, surface and subsurface structures at or near the site of the work and shall repair or restore any damage to such facilities, except utilities, resulting from failure to comply with the requirements of this contract or the failure to exercise reasonable care in the performance of the work. If the Contractor fails or refuses to repair any such damage promptly, the City may have the necessary work performed and charge the cost thereof to The Contractor.

4.3 At points where The Contractor's operations are adjacent to utility facilities, which if damaged, might result in expense, loss, disruption of service or other undue inconvenience to the public or to the Owner, work shall not be commenced until all arrangements necessary for the protection thereof have been made by the Contractor. The Contractor shall be solely and

directly responsible to the Owner and operators of such utilities for any damage, injury, expense, loss, inconvenience, or delay caused by The Contractor's operations.

4.4 The Contractor shall not repair or attempt to repair utility damage but shall immediately contact the utility owner. The Contractor shall obtain the name, address, and telephone number of each utility company to contact. The Contractor shall submit to the Engineer these said names and addresses.

4.5 The Contractor shall comply with the Florida Building Code and City Code regarding precautions to be taken in the protection of existing vegetation, structure, utilities, and improvements.

4.6 The Contractor shall maintain access to fire hydrants and alarm boxes throughout the prosecution of the work. Hydrants and fire alarm boxes shall be kept clear and kept visible at all times unless approved otherwise. If visibility cannot be maintained, The Contractor shall provide clearly visible signs showing the location of the fire hydrant and fire alarm boxes.

4.7 The Contractor shall comply with the requirements of the Clean Air Act and the Federal Water Pollution Control Act as well as other requirements specified in those regulations and guidelines listed thereunder.

5.0 EXISTING LANDSCAPING: The Contractor shall be fully responsible for maintaining in good condition, existing trees, grass and shrubs situated within the designated right-of-way, project site or on private property adjacent to the work.

6.0 EXISTING SIGNS AND UTILITY CASTINGS: All existing signs and utility castings shall be preserved and shall remain the property of the City of Opa-Locka. Those not reused shall be delivered to the Opa-Locka Public Works Yard at 12950 NW 42 Ave in Opa-Locka, FL 33054.

7.0 STOCK PILING MATERIALS: Contractor shall not stockpile materials at the project site unless approved in writing by the Engineer.

8.0 PERMITS: The Contractor shall obtain all required occupational licenses and permits, etc., and pay all required fees. Permits issued by the City will be issued without charge to the Contractor.

9.0 EXTRAS: Bills for extras will be allowed only when work is ordered in writing and approved by the Public Works Director. No money will be allowed for extra work unless approved in writing, beforehand, by the Public Works Director.

10.0 CLEANING UP: The Contractor will be required to leave the work and adjacent areas free of any accumulated rubbish or surplus materials on a daily basis, unless

otherwise directed by the Public Works Director. In the event of failure or undue delay on the part of the Contractor, the City may employ such equipment and labor as may

be necessary, and charge such costs against the Contractor and deduct the amount from the monies due the Contractor for work performed.

11.0 RESTORATION: The Contractor shall complete all restoration as the work is completed but in no event later than five (5) working days.

12.0 TESTING: The Engineer or other person designated by the Public Works Director to supervise the work shall have the right at any time to have tests made on any material used on the job. All expenses for tests shall be borne by the City of Opa-Locka, except the cost of re-testing materials which failed to meet the specifications and waiting time due to Contractor failure to be ready for tests when scheduled. The cost and scheduling of such re-testing shall be the responsibility of the Contractor. All re-testing shall be done by the testing laboratory which test the failed samples. The Contractor will inform the City of his source of materials with sufficient time to secure the necessary samples and perform the necessary tests. The Contractor shall request and receive inspections of specific phases of work as required elsewhere in these specifications. The Contractor shall provide current modified proctor test results for all fill material used on the job.

13.0 PAYMENT: Payment will be made in full compensation for all work performed, materials, labor, tools and equipment furnished, and incidental expenses necessary to complete the work. Payment shall be made on 90% of the monthly estimate and upon the presentation of partial releases of lien. Final payment shall be made upon presentation of a completion statement, receipt of the final releases of lien, receipt of as-built drawings and after final acceptance by the City.

14.0 ACCEPTANCE: Acceptance by the City shall not relieve the Contractor of the responsibility of correcting any defective part of the work resulting from either workmanship or materials or replacing or repairing damaged property resulting from any phase of the Contractor's work.

15.0 GUARANTEE: The Contractor shall guarantee all materials and workmanship for a period of one year from the date of **acceptance** by the City.

16.0 LINE AND GRADE: Where required as determined by the Engineer, the City will establish a base line and reference elevations. All additional lines and grades required for completion of the work shall be furnished at the Contractor's expense.

17.0 TRAFFIC MAINTENANCE: The Contractor shall provide all temporary signing, striping, detouring, barricading, signals, competent flagmen, etc. required in accordance with the minimum requirements of the latest Manual of Uniform Traffic

Control Devices, whenever and wherever needed for pursuance of the project, and/or

as directed by the Engineer. The Contractor shall also coordinate these operations with the City of Opa-Locka Public Works Department. The Contractor shall supply the Engineer with a traffic maintenance plan.

18.0 PROTECTION OF WORK: It shall be the Contractors' responsibility to protect the public and workmen from ongoing construction hazards.

19.0 UNIFORMED POLICE: The Contractor shall be responsible for obtaining the services of the uniformed police officers as needed or as directed by the Engineer. The Contractor shall be reimbursed for the direct, actual expenses for such uniformed police officers.

20.0 INSPECTION: Inspection will be required during all phases of construction, and it shall be the Contractor's responsibility to contact the Engineer or its representative when any work is being performed. The Contractor shall also be responsible for coordinating all inspections of work performed by Subcontractors. Failure to contact the Engineer/Architect or its representatives to obtain the required inspections shall be sufficient cause for rejection.

21.0 LICENSES: The Contractor and all Subcontractors shall submit at the time of bidding, copies of all licenses held by the Company that pertain to the type of work to be performed under this contract. Failure to submit copies of licenses is grounds for rejection of the bid.

22.0 CONTACT PERSON: The Contractor shall provide the Engineer with a local (Miami Dade County) telephone number where the Contractor can be contacted 24 hours a day for the duration of the project.

23.0 UTILITY COORDINATION: The City will not be liable for any delay or added expense the Contractor experiences due to the actions of others, nor shall the City be held responsible for any damages which may be incurred, due to the actions of the Contractor or representative.

24.0 EXAMINATION OF PREMISES: Before submitting proposals for his work, each bidder will be held to have examined the premises and satisfied himself as to the existing conditions under which he will be obligated to work, including all conditions which will in any way affect the work under this contract.

25.0 NON-EXCLUSIVE CONTRACT: Nothing in this contract shall prevent the City from employing other contractors to perform the same or similar work. This can include other contractors working concurrently on the same location.

GC-4

THE CITY OF OPA-LOCKA OPA-LOCKA,

FLORIDA

SPECIAL CONDITIONS

1.0 SCOPE OF WORK:

1.1 SESAME STREET CULVERT REPLACEMENT: The work generally consists of but is not necessarily limited to the following: the selling, delivering and installing of Contractor furnished materials and equipment necessary for the complete replacement of a culvert within along Sesame Street between NW 135th Street and Atlantic Avenue. Replacement includes 66-inch Aluminized Steel piping with new curb and gutters, sidewalk, guardrail, and pavement resurfacing with all appurtenant for miscellaneous items and work for a completed project.

2.0 COMPLETE PROJECT REQUIRED: The specifications describe the various items or classes of work required enumerating or defining the extent of same where necessary to clarify the drawings, but failure to list any items shall not relieve the Contractor from furnishing, installing and performing such work where shown on the drawings, required by any part of the specifications or necessary for the satisfactory completion of the project.

3.0 WORK SCHEDULE: The Contractor shall submit schedules which show the order in which the Contractor proposes to carry out the work with dates for starting various parts of the work and estimated completion dates. The progress schedule s shall be furnished to the Engineer prior to the pre-construction meeting date which will be established by the City.

4.0 PRE-CONSTRUCTION MEETING: After the contract has been awarded and signed, but prior to commencement of work, a pre-construction meeting shall be held. The meeting shall be attended by authorized representatives of the City and Contractor. The purpose of this meeting will be to review the Contractor's submitted progress schedule, clarify jurisdiction and to acquaint all parties present with the authorized representative to be notified. The Contractor will be notified in writing as to the date and place of the meeting.

5.0 AS-BUILT INFORMATION: As work progresses, the Contractor must record all information pertaining to changes and deviations from the contract drawings with special attention to all underground installations. At completion of the job, the Contractor shall submit a complete set of reproducible as-built drawings to the City. Additionally, the Contractor shall maintain a field book with all deviations recorded.

The completed as-built sketches and field books shall become the property of the City. As-built information must be supplied with each pay request. Failure to provide as-built information is cause to reject pay request.

6.0 LIQUIDATED DAMAGES: Should the Contractor, or in the case of default, the surety, fail to fully complete the work within the time stipulated in the proposal, the minimum

sum of five hundred dollars ($500.00) per day shall be deducted from any money due the Contractor not as a penalty but as liquidated damages.

7.0 APPROVAL OF MATERIALS:

7.1 Whenever in these plans and/or specifications a certain brand of materials is specified, it is done for establishing the level of quality, capacity and the characteristics desired. Materials or products specified by the name of manufacturer or the brand or trade name or catalog reference shall be the basis of the bid.

7.2 The Contractor shall make written request for the use of alternate materials within ten (10) days after the Contract is signed, and before ordering any materials requiring approval. If the Contractor makes no request for approval of alternate materials within ten (10) days of the signing of the Contract, it shall be assumed that he intends to furnish the items specified.

7.3 The use of materials other than that specified without the written approval of the Engineer shall be sufficient reason for rejection of the work.

8.0 USE OF PUBLIC STREETS: Construction in the right-of-way or streets shall be performed in such a manner as to provide a minimum of inconvenience to the residents of the area. Access to all residents' homes shall be maintained at all times. A minimum of one traffic lane shall be open at all times.

9.0 STRIPING:

9.1 Temporary striping shall be placed within 48-hours of completion of each course of asphalt unless another course is placed within 48-hours. The cost of temporary striping shall be included in the unit cost of permanent thermoplastic striping.

9.2 Permanent thermoplastic striping shall be placed within 30 days of completing final paving unless otherwise approved by the Engineer.

10.0 RESTORATION OF SURVEY MARKERS: When existing survey markers are removed or destroyed as a result of the construction, it shall be the responsibility of the contractor to replace them using a registered licensed surveyor.

11.0 PROJECT LAYOUT: The Contractor shall layout the proposed work and contact all utilities to verify utility locations. If changes are required, due to conflict or design, the Engineer will make the final determination.

12.0 WORKING HOURS: The normal City working hours are Monday through Friday 8:00 a.m. until 5:00 p.m.

13.0 FINANCIAL STATEMENT: As part of the Contractor's submittal, he/she shall include a certified financial statement detailing the company's financial status over the previous two years.

14.0 NOTICE TO PROCEED: A single notice to proceed will be issued for this project. Upon receipt of the notice to proceed, the contractor shall commence work upon the site(s) within 10 working days and continue such work in an expeditious manner to a conclusion acceptable to the Engineer. No more than 7 consecutive days without construction activity will be allowed unless approved by the Engineer.

15.0 ENVIRONMENTAL PROTECTION:

General Requirements – The Contractor shall provide and maintain environmental protection during the life of the Contract. Environmental protection shall be provided to correct conditions that develop during the conductance of the work, or that are required to control pollution that develops during the development of project. The Contractor's operations shall comply with all Federal, State and local regulations pertaining to water, air, solid waste, and noise pollution.

Protection of Natural Resources – It is intended that the natural resources within the site and outside the limits of permanent work performed under this Contract be preserved in their existing condition or be restored to an equivalent or improved condition upon completion of the work. The Contractor shall confine his work activities to areas defined by the Contract Documents. All work under this contract shall be performed in such a manner that any adverse environmental impacts are reduced to a level that is acceptable to the City. At all times special measures shall be taken to prevent oily or hazardous substances from entering the ground, drainage areas, or local bodies of water.

Control and Disposal of Wastes – The Contractor shall transport and dispose of all waste in a manner that complies with Federal, State, and local requirements. The Contractor shall provide the Engineer with a copy of any state and/or local permits or licenses which reflect such agency's approval and compliance with applicable solid waste disposal regulations. The permits or licenses which reflect such agency's approval and compliance with applicable solid waste disposal regulations. The permits or licenses and the location of the disposal area shall be provided prior to transporting any waste material. Fueling and lubricating of equipment and motor vehicles shall be conducted in a manner that affords the

maximum protection against spills and evaporation. Lubricants and waste oil shall be disposed of in accordance with approved procedures meeting Federal, State and local regulations.

Preservation of Water Courses – The Contractor shall maintain the working area free of excess debris and litter. Furthermore, the Contractor shall take all necessary precautions to protect the Canal waterway in a manner that complies with Federal, State, and local requirements.

The maximum use of low-noise emission products as certified by the Environmental Protection Agency shall be made when available.

16.0 SAFETY: The Contractor shall be responsible for the safety of the Contractor's employees. The Contractor shall abide by all Federal, State, County, and City safety requirements and regulations. The Contractor is responsible to furnish the Contractor's employees with all required safety equipment. The Contractor is required to comply with all applicable OSHA regulations including, Right to Know, Confined Space Entry, Airborne Blood Pathogens.

The Contractor is fully responsible to furnish safety equipment to all of the Contractor's employees on the Owner's job site, including but not limited to safety glasses, gloves, vests, hard hats, braces or any other required safety item. The Contractor is required to make certain that each employee is wearing the proper safety clothing including shoes.

17.0 CONFINED SPACE ENTRY PERMIT: The Contractor must comply with all the provisions contained in OSHA 1910.146 and shall show proof of compliance with the first project invoice. No payment shall be made until such proof is presented and approved by the City.

TECHNICAL SPECIFICATIONS

DIVISION 1 – GENERAL REQUIREMENTS

01010 SUMMARY OF WORK

PART 1 – GENERAL 1.0.1

SCOPE OF WORK

A. This section describes the project in general and provides an overview of the extent of the work to be performed under this Contract. Detailed requirements and extent of work is stated in the applicable Specification sections and shown on the Contract Drawings. The Contractor shall, except as otherwise specifically stated herein or in any applicable parts of the Contract Documents, provide and pay for all labor, materials, equipment, tools, construction equipment, and other facilities and services necessary for proper execution, testing, and completion of the work under this Contract.

1.0.2 DEFINED TERMS

A. As-Built Drawings: As-built drawings reflect field changes and construction modifications to the conformed Bid Documents.

B. Contract Documents: Shall mean all those documents named in the contract.

C. Contractor: Contractor shall mean any person engaged to supply labor, materials or equipment for use in the fulfillment of the project.

D. Construction Drawings: Shall mean the drawings, plans, or reproduction thereof which show scope, character, location, dimensions, and other details of the work to be performed under the Contract Documents.

E. Engineer: Shall mean the City Engineer of the City of Opa-Locka, Public Works Department, or City's designee.

F. Project: Shall mean and include all construction, for which the Contractor is responsible under the contract documents

G. Regulations: Shall mean laws, ordinances, statutes, and lawful order issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the work.

H. The City: Shall mean the City of Opa-Locka, Florida.

I. Work: Shall mean all labor, permits, bonds, equipment, materials and incidentals required.

1.0.3 SPECIFICATIONS

A. The specifications included in these Contract Documents establish the minimum performance and quality requirements for materials and equipment together with the minimum standards for quality of workmanship and appearance. Generally, there has been no attempt to separate the Specification sections into groups for the work of separate Subcontractors, or for work to be performed by the various trades. Should there be any question as to the interpretation of any Specification section or part of Specification section, such question should be directed to the Engineer prior to the submittal of a proposal for the work under this Contract.

B. The Sesame Street Culvert Replacement work shown on the drawings is intended to be comprehensive and descriptive, not an exact and complete representation of the actual finished work. Pipeline replacement shall include all accessories and components required to provide a complete and satisfactory system as specified, even though some items may not be specifically shown on the drawings.

C. It is the intent of the City to obtain a complete functional, and satisfactory installation under this Contract, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the plans or stated herein.

D. The Contractor shall also supply all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

1.0.4 REASONABLY IMPLIED PARTS OF THE WORK

A. Any part of the work which is not mentioned in the specifications but is shown on the drawings, or any part not shown on the drawings but described in the specifications, or any part not shown on the drawings nor described in the specifications, but which is necessary or normally required as a part of such work, or is necessary or required to make each installation satisfactorily and legally operable, shall be performed by the Contractor as incidental work, without extra cost to the City, as if fully described in the specifications and shown on the drawings, and the expense thereof shall be included in the applicable unit prices or lump sum bid for the Work.

1.0.5 DESCRIPTION OF WORK

A. The project includes the in-kind replacement of the existing culvert with design amendments to ensure adequate conveyance capacity, pedestrian and vehicular transit safety, and proper scour protection. The project would involve the demolition of the existing culvert structure, excavation for new structures, sloped backfill for culvert installation, new concrete pipe culvert, embankment saddle slope stabilization with riprap, new top slab, asphalt pavement restoration, pavement markings, reconstructed sidewalk, and new guard rails.

B. The project is located along Sesame Street, between the intersections with Atlantic Avenue and NW 135th Street, Opa-Locka, Florida 33054.

C. It is the intent of the City to obtain a complete and working installation under this Project and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.0.6 PROJECT BACKGROUND

During a recent milling and resurfacing project, it was discovered by the City's contractor that the culvert was in poor condition and would not withstand the work underway. After an assessment, it was recommended to replace the existing culvert structure with a new culvert that will be designed for current system demands and will provide a permanent installation, that maintains safe pedestrian and vehicular traffic, and a provides a prolonged service life. As a result of the damages discovered, Sesame Street is currently closed to traffic, and will remain closed until its replacement is finalized.

1.0.7 WORK COVERED BY CONTRACT DOCUMENTS

A. Following receipt of Notice to Proceed with the work, the Contractor shall notify the Engineer at least ten (10) days before he/she is ready to start actual construction, to allow the City time to make arrangements for inspection of the work.

B. Work under the Contract shall be scheduled and performed in such a manner as to result in the least possible disruption to the operation of the existing facilities. Any control modifications to the existing facilities shall not be made without first obtaining written permission form the Engineer and the City.

C. Critical events in the sequence of construction are specified herein. The outline sequence of construction does not include all items necessary to complete the work but is intended to identify the sequence of critical events necessary to minimize disruption to the ongoing operation. The sequence of construction is a precedence requirement and does not attempt to schedule the Contractor's work. It is intended

only to indicate which activities must precede other activities in order to minimize interference and disruptions.

D. The existing facilities shall be maintained in an operable condition by the Contractor during construction, as indicated in the sequence of construction. All work by the Contractor that disrupts the normal operations shall be shown on the Construction Schedule and specifically scheduled with the City's staff. The schedule notification shall consist of a written notice defining the work to be accomplished, the function that will be interrupted, the duration of the interruption, and the mitigation effort to be performed by the Contractor to maintain systems capacity continuously. The written notice shall be submitted to the City fourteen (14) days in advance of the proposed work and the City will respond to the Contractor in writing within seven (7) days of receipt of the notice regarding the acceptability of the proposed plan.

1.0.8 SEQUENCE OF CONSTRUCTION

A. The general sequence of construction shall be as follows, but **a detailed sequence of construction shall be submitted by the Contractor and approved by the Engineer before any work is started**. The City reserves the right to make changes to the sequence as necessary to facilitate the work or to minimize conflict with operations and no extra compensation will be allowed.

B. CAPITALIZED ITEMS INDICATE WORK OR FUNCTIONS TO BE PERFORMED BY CITY FORCES. All other items shall be performed by the Contractor with special emphasis on the fact that numerous standard and miscellaneous construction phases are not mentioned specifically but shall be performed by the Contractor as required for a complete Project.

Note: For simplicity, the Sequence of Construction below will not detail the following items. **These shall be the responsibility of the Contractor and no extra compensation will be allowed.**

1. Contractor's field verification of all information provided in the Plans and to determine the type, location, elevation and extent of any utilities which may not have been shown on the Plans.

2. Notify "Sunshine State One-Call of Florida Inc., 811," forty-eight (48) hours prior to any excavation. Locate all utilities along the route of the Project.

3. Contractor's operations involving removal of the existing Culvert shall include:

a. Excavate existing Culvert pipes and provide proper flow diversion between the Canal.

4. Installation of new Culvert system, including: piping, mitered end section, backfilling, rip rap placement, and concrete pavement.

5. Construction of concrete curb and gutter, sidewalk, handicap access ramp, and guardrails.

6. Milling and resurfacing of pavement extents.

7. Contractor's PSM shall reestablish the design baseline, vertical control points and reference points, and establish proposed pipeline location in accordance with Section 02314 "Excavation, Backfill and Fill for Structural Facilities and Utility Systems - Construction Methods."

8. After items 6 and 7 are completed, the Contractor shall meet with the City Inspector at the Project site and perform a pre-construction walk-through along the entire route of the Project to identify possible problems or conflicts with the proposed pipeline location.

9. The general sequence of work shall be as follows:

1) Phase I – Mobilization

Step – 1 Initiate mobilization. The Contractor shall set up storage, staging and parking areas, temporary environmental controls and tree protection devices in the project site. Obtain permits, develop and submit construction schedule and start shop drawing submittal. Contractor shall allow access to the other facilities within the project area, including adjacent businesses and homes at all times during construction.

Step – 2 Call for locates (Sunshine 811) and document all location marks in the field.

Step – 3 Contractor shall include the necessary provisions to safeguard the existing utilities noted within the project area. Furthermore, the Contractor shall be advised that the utilities shown on plans are based on best available information and shall take all necessary precautions to confirm, identify, preserve, and maintain the integrity while performing construction.

Step – 4 Contractor shall **immediately** open a dialog with all existing utilities in the project area. Contractor shall notify Engineer of any utility relocation requirements and costs. Utility relocations shall be reimbursed under a dedicated allowance account. Failure to properly coordinate any required utility relocations may result in delays for which the Contractor may be liable for.

Step – 5 Verify locations, elevations, dimensions, manufacturer of pipes, equipment, etc., before ordering materials to complete the work in accordance with the Contract Documents, Shop Drawings and field conditions.

Step – 6 Upon approval of shop drawings, order long lead items so that materials may be delivered in a timely fashion without delays to construction.

2) Phase II – Demolition of Existing Culvert and Appurtenances NOTE: Refer to Drawings, Sheets C-01 and C-02

Step – 1 Installation of all Erosion Control measures within the Canal.

Step – 2 Removal of existing concrete pavement, concrete headwall, and culvert piping.

Step – 3 Prepare temporary bypass system, if necessary, to divert Canal flows from East to West and vice versa. After successful flow diversion and authorization by the City; the Contractor shall proceed with the installation of the removal of the existing Culvert piping.

3) Phase III – New Culvert Installation

Step – 1 Prepare bedding material to lay stone base for new piping.

NOTE: The Contractor shall provide appropriate shoring to conduct the stone bedding and 66-inch SRASP pipe installation in dry conditions.

Step – 2 Secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations.

Step – 3 The Contractor shall secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations and up to elevation established on plans. Embankment slopes shall be established.

Step – 4 Install concrete headwall at pipe ends.

Step – 5 Install geotextile matting and, sand-cement and Rubble Stone embankment stabilization.

Step – 6 Lay new concrete curb and gutter and sidewalk.

Step – 7 Install new guardrail.

Step – 8 Install new concrete shoulder barrier

4) Phase IV – Final Sitework and Project Closeout

Step – 1 Form and pour the 8" thick concrete pavement surface above Culvert piping.

Step – 2 Lay new concrete curb and gutter and sidewalk.

Step – 3 Mill and resurface top 1" surface course of roadway.

Step – 4 Paint roadway pavement markings and remove temporary construction signage.

Step – 5 Demobilization and related closeout activities shall be in accordance with section 01700 "Project Closeout".

Step – 6 Complete all remaining miscellaneous and appurtenant work, including restoration of damaged survey control points, landscape restoration and final inspection and cleanup.

C. The Contractor's equipment must be in first class operating condition, including proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment. The Contractor shall provide a temporary electric service for his electric equipment as specified herein below, and shall pay all cost thereof, including all charges for electricity used during the entire course of the project until its acceptance by the City. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01011 SITE CONDITIONS

PART 1 – GENERAL

1.0.1. SITE INVESTIGATION

A. The Contractor acknowledges that he has satisfied them as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation: disposal, handling and storage of materials; availability of labor, water, electric power, roads; disposal of water from construction; uncertainties of weather; the conformation and conditions of the ground; the type of equipment and facilities needed preliminary to and during the prosecution of work and all other matters which can in any way affect the work or the cost thereof under this contract.

B. The Contractor further acknowledges that he has satisfied himself as to the character, quality, and quantity of surface materials to be encountered from inspecting the site and from evaluating information derived from exploratory work that may have been done by the City included with these contract documents. Any failure by the Contractor to acquaint the City or them with all the available information will not relieve them from the responsibility for properly estimating the difficult or cost thereof under this Contract.

C. The Contractor acknowledges that by personal field observation or other means satisfactory to himself, performed prior to the bid, he has included in the prices bid all costs for dealing with all construction problems create by observable above or on grade features on or adjacent to the site of the site of the work whether or not these features are shown on the plans or described in the specifications. In instances where the observable features indicate subsurface conditions which may affect the project work, as for example, a pavement patch or catch basin gratings indicating respectively a utility or storm sewer not shown on the plans, the Contractor acknowledges that he has made timely, diligent, inquiry of the Engineer or by other means fully satisfied themselves prior to the bid as to the nature of, and costs created by, the subsurface condition and included all costs therefore in the prices bid.

1.0.2. SITE CONDITIONS

A. All information obtained by the City regarding the site conditions, topography, subsurface information, groundwater contamination, groundwater elevations, existing construction of site facilities as applicate, and similar data will be made available for inspection at the office of the Engineer upon request. Such information is offered as advisory information only. Neither the Engineer nor the City assumes any responsibility for the completeness of, or for the Contractor's interpretation of, such advisory information. Prior to bidding and after written approval from the City, bidder

shall make his own investigations to satisfy themselves with site conditions at their own cost.

B. Surface investigations, including test borings, have been made to indicate subsurface conditions at locations in the project.

C. Prospective bidders are advised, at their own expense, to make such subsurface investigation, by boring or test hole excavation, as may be desirable. However, such work shall be scheduled by appointment with the Engineer if for a City site or by notification to the City and property permitted if in the public right of way.

1.0.3. DIFFERING SUBSURFACE CONDITIONS

A. In the event Subsurface or latent physical conditions are found materially different from those indicated in these documents and differing materially from those ordinarily encountered and generally recognized as inherent in the character of work covered in these project documents, promptly, and before such conditions are disturbed, notify the Engineer in writing of such changed conditions.

B. The Engineer will investigate such conditions promptly and following this investigation, the Contractor shall proceed with the work, unless otherwise instructed by the Engineer. If the Engineer finds that such conditions do so materially differ as to cause an increase or decrease in cost and time considered reasonable by the Engineer, the City will make the final decision regarding any adjustment in cost or time for completion.

C. In the event that site conditions differ from those expected by the Contractor, the Contractor shall proceed to complete the work as contemplated by the plan and specifications on his own cost and expense. If in the discretion of the Engineer, the difference in site conditions renders completion of the work as described by the plans and specifications impossible, the Engineer may alter the work, whereupon the Contractor shall be compensated for any extra work pursuant to "Extra Work and Payment therefore" of the special conditions; the Engineer shall no alter the work where the site conditions render the work more difficult or costly to perform, if such work is otherwise still possible as described in the contract documents.

1.0.4. EXISTING UTILITIES AND LOCATION SERVICES

A. Known utilities and structures adjacent to or encountered in the work are shown on the drawings. The locations shown are taken from existing records and the best information available from the existing plans; However, it is expected that there may be some discrepancies and omissions in the locations and quantities of utilities and structures shown. Those shown are for the convenience of the Contractor only, and no responsibility is assumed by either the Engineer or the City for their accuracy or completeness.

B. **No request for additional compensation or Contract time (except for a noncompensable time extension at the sole discretion of the Engineer, whose decision shall be final) resulting from encountering utilities or structures not shown, or differing in location or elevation from that shown, will be considered. The Contractor shall explore sufficiently ahead of the work to allow time for any necessary adjustments without delay to the progress of the installation. Costs due to delays occasioned by encountering underground utilities or structures which could have or should have been discovered by timely exploration ahead of the work shall rest solely with the Contractor.**

C. Prior to proceeding with excavation, the Contractor shall contact all utility companies and all other users of the right of way in the area to aid in locating their underground services. It shall be the Contractor's responsibility to contact utility companies at least three (3) normal working days before starting construction. The Contractor shall proceed with caution in the excavation and preparation so that the exact location of underground utilities may be determined.

D. It is the responsibility of the Contractor to ensure that all utility or other existing facilities, the stability of which may be endangered by the close proximity of excavation, are temporarily held in position while work proceeds in the vicinity of the facilities and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.

E. The Contractor shall take all reasonable precautions against damage to existing utilities. However, in the event of a break in an existing water main, gas main, sewer or underground cable, the Contractor shall immediately notify the responsible official of the organization operating the interrupted utility. The Contractor shall lend all possible assistance in restoring services and shall assume all cost, charges, or claims connected with the interruption and repair of such services, as determined by the City.

1.0.5. CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

A. Where the Contractor's operation could cause damage or inconvenience to railway, telephone, fiber optic, television, electrical power, oil, gas, water, sewer, irrigation system, or any other utility, public or private, the Contractor shall make all arrangements necessary for the protection of these utilities and services.

B. Notify all utility companies that are affected by the construction operation at least fortyeight (48) hours in advance. Under no circumstance expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities and utility poles where necessary. **Absolutely no extra compensation will be allowed for construction problems created by utility poles of whatever size, overhead electric, telephone or other lines whether shown on the plans or not. The Contractor is solely responsible for discovering such items in the field prior to bidding and including all costs for such work in the prices bid.**

C. The Contractor and his Subcontractor shall be solely and directly responsible to the Owners and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this contract.

D. Neither the City nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractors failure to protect utilities encountered in the work.

E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no event shall interruption of any utility service be allowed unless granted by the Owner of the utility.

F. In the event water service lines that interfere with construction are encountered, the Contractor may, by obtaining prior approval of the water utility, cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense and as approved by the Engineer.

G. Replace, with material approved by the Engineer, at Contractor's expense, any and all other laterals, existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents and as approved by the Engineer.

1.0.6. INTERFERING STRUCTURES

A. Take necessary precautions to prevent damage to existing structures whether on the surface, above ground, or underground. An attempt has been made to show major structures on the plans. While the information has been compiled from the best available sources, its completeness and accuracy cannot be guaranteed, and is presented as a guide. The Contractor is solely responsible for field verification of all information provided and to determine the type, location, elevation and extent of any utilities which may not have been shown on the plans.

1.0.7. FIELD RELOCATION

A. During the process of construction, it is expected that minor relocations of the work may be necessary. Such relocations shall be made only by the direction of the Engineer at the Contractor's expense. If existing structures are encountered that will prevent construction as shown, notify the Engineer before continuing with the work in order that the Engineer may make such field revisions as necessary to avoid conflict with the existing structures. If the Contractor fails to notify the Engineer when an existing structure is encountered, and proceeds with the work despite this interference the Contractor does so at his own risk.

B. Representatives of utility companies, the railroad companies, the traffic and transportation authorities, etc., shall be notified in accordance with the provisions set forth in the relevant sections of the specifications and the permitting documents.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01015 INDEX OF DRAWINGS

PART 1 – GENERAL 1.0.1.

PLANS BY THE CITY

A. Plans dated November 2022 and any subsequent revision, thereto, introduced by Addenda prior to bid, showing this work, are hereby made a part of the Contract Documents, and are **listed** as follows:

OPA-LOCKA CULVERT REPLACEMENT

Sheet No.	Drawing No.	Title
GENERAL		
G-01		TITLE SHEET, LOCATION AND LIST OF DRAWINGS
G-02		ABBREVIATION, SYMBOLS, GENERAL NOTES AND LEGENDS CIVIL
C-01		DEMOLITION AND EROSION CONTROL PLAN
C-02		DEMOLITION AND EROSION CONTROL NOTES AND DETAILS
C-03		PROPOSED SITE PLAN & GRADING PLAN
C-04		PAVEMENT RESTORATION PLAN
C-05		PAVEMENT MARKING AND SIGNAGE
C-06		MOT PLAN
C-07		MOT DETAILS
C-08		STANDARD DETAILS
C-09		STANDARD DETAILS
C-10		STANDARD DETAILS
C-11		STANDARD DETAILS
S-1		PIPE CULVERT STRUCTURAL DETAILS
S-2		PIPE CULVERT STRUCTURAL DETAILS

B. **Due to the possibility of typing errors or omissions, the above list shall not be considered as necessarily complete, nor shall the County/FDOT Standard Details which may be included elsewhere herein be considered as forming a complete listing of all County/FDOT Standard Details which may apply to this Project. Perform all work shown on all sheets of the Plans, as specified herein or necessary for a complete functional installation and no extra compensation will be made due to the omission or incorrect listing of a Drawing in this Section. All County/FDOT Standard Details are incorporated in these Contract Documents by reference and all work shall be performed in accordance with all applicable County/FDOT Standard Details.**

PART 2 PRODUCTS NOT

USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01016 SAFETY REQUIREMENTS, HURRICANES PREPAREDNESS AND PROTECTION OF PROPERTY

PART 1 – GENERAL

1.0.1. CONTRACTOR'S RESPONSIBILTY FOR SAFETY

A. Conduct whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees) and property during the contract period. This requirement shall apply continuously and not be limited to normal working hours.

B. The Contractor shall be in compliance with all applicable provisions of the Occupational Safety and health Act of 1970. The Contractor's Manual of Safety Practices, dealing with the firm's policies on field safety procedures for employees shall be submitted to the Engineer for his review before "Notice to proceeded" will be issued.

C. Neither the professional activities of the design professional, nor the presence of the design Professional nor his or her employees and subconsultants at a construction site, shall relieve the Contractor and any other entity of their obligations, duties and responsibilities including but not limited to, construction means, methods, sequence techniques or procedures necessary for performing, superintending, or coordinating all portions of the work of construction in accordance with the project documents and any health and safety precautions required by any regulatory agencies.

1.0.2. FEDERAL STATE AND LOCAL SAFETY REQUIEREMENTS

A. Safety provisions shall conform to the federal and state Departments of labor Occupational Safety and Health Act (OSHA), and all other applicable federal, State, County, and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of these project Documents. Where any of these are in conflict, the more stringent requirements shall be followed. Contractor's failure to thoroughly familiarize with the safety provisions shall not relieve him/her from compliance with the obligations and penalties set forth therein.

B. All excavations made in the earth shall be performed in compliance with the State of Florida Trench Safety Act, OSHA 29 CFR 1926 Subpart P (Chapter 90-96, Laws of Florida). The Contractor shall appoint a *competent person*, in accordance with subpart P, who shall be present at the jobsite. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

C. The Contractor shall be familiar with the "Underground facility Damage" Prevention and safety Act" Florida Statute 556. The Contractor shall contact the Sunshine State One Call of Florida, at 01-800-432-4770 or by submitting an internet ticket entry via www.sunshine811.com) at least 48 hours prior the excavation. Failure to familiarize himself with the safety provisions shall not relieve him/her from compliance with the obligations and penalties set forth therein.

D. Conduct operations in such a manner utilizing warning devices, such as traffic cones, barricades and warning lights that traffic, pedestrian and City personnel are given adequate warning of hazards of the worksite as may be deemed necessary by the City, Engineer of Record, and governing agency having jurisdiction over the work or political subdivision.

E. The Contractor shall be in compliance with all applicable provisions of the OSHA Code of Federal Regulations (CFR), including, but not limited to, the following:

1. 29 CFR Part 1910 Subpart D - Walking-Working Surfaces
2. 29 CFR Part 1910 Subpart G - Occupational Health and Environmental Control
3. 29 CFR Part 1910 Subpart H - Hazardous Materials
4. 29 CFR Part 1910 Subpart I - Personal Protective Equipment
5. 29 CFR Part 1910 Subpart J - General Environmental Controls
6. 29 CFR Part 1910 Subpart N - Materials Handling and Storage
7. 29 CFR Part 1910 Subpart P - Hand and Portable Powered Tools and Other Hand-Held Equipment
8. 29 CFR Part 1910 Subpart Q - Welding, Cutting and Brazing
9. 29 CFR Part 1910 Subpart S – Electrical
10. 29 CFR Part 1910 Subpart T - Commercial Diving Operations
11. 29 CFR Part 1910 Subpart Z - Toxic and Hazardous Substances
12. 29 CFR Part 1926 Subpart E - Personal Protective and Life Saving Equipment
13. 29 CFR Part 1926 Subpart H - Materials Handling, Storage, Use, and Disposal
14. 29 CFR Part 1926 Subpart I - Tools - Hand and Power
15. 29 CFR Part 1926 Subpart J - Welding and Cutting

16. 29 CFR Part 1926 Subpart K – Electrical

17. 29 CFR Part 1926 Subpart L – Scaffolds

18. 29 CFR Part 1926 Subpart M - Fall Protection

19. 29 CFR Part 1926 Subpart P – Excavations

20. 29 CFR Part 1926 Subpart Q - Concrete and Masonry Construction

21. 29 CFR Part 1926 Subpart S - Underground Construction, Caissons, Cofferdams, and Compressed Air

22. 29 CFR Part 1926 Subpart Z - Toxic and Hazardous Substances

23. 29 CFR Part 1926 Subpart AA - Confined Spaces in Construction

24. 29 CFR Part 1926 Subpart CC - Cranes and Derricks in Construction

F. In addition, the Contractor shall adhere to any other applicable Federal, State and Local Safety and Health Regulations involving General industry and/or Construction Standards not mentioned in the Specifications.

G. For trench excavations in excess of five (5) feet in depth, the Contractor shall comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act," the "Trench Safety Act" section of the Quotation, and Section 6.01 "Excavation."

H. The Contractor shall comply with the provisions of Florida Statutes Chapter 556, "Underground Facility Damage Prevention and Safety Act." The Contractor shall contact Sunshine 811 by calling 811 or 1-800-432-4770, or by submitting an internet ticket entry via www.sunshine811.com, at least forty-eight (48) hours prior to any excavation. Failure to familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and the penalties set forth herein.

I. All open excavations made in the earth shall be performed in compliance with OSHA 29 CFR Part 1926 Subpart P - Excavations, and Florida Statutes Chapter 553, Part III, "Trench Safety Act." The Contractor shall appoint a "competent person," in accordance with Subpart P, who shall be present at the job site. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to

employees, and who has authorization to take prompt corrective measures to eliminate them.

1.0.3. SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

A. The Contractor shall at all time provide proper facilities for safe access to the work by authorized government officials.

1.0.4. CONSTRUCTION SAFETY PROGRAM

A. Develop and maintain for the duration of the project, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor's Manual of Safety practices outlining the firms policies on field safety procedures for employees shall be submitted to the Engineer for review before "Notice to Proceeded" will be issued. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.

B. Certain products specified in these specifications contain warnings by the manufacturers that under certain conditions, if instructions for use are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.

C. The duty of the Engineer to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's Safety Supervisor, the safety program, or any safety measures taken in, on, or near the construction site.

1.0.5. SAFETY EQUIPMENT

A. As part of the safety program, maintain at an office or other well-known place at the jobsite, safety equipment applicable to the work as prescribed by the governing safety authorities, all articles necessary for giving first-aid to the injured, and stablish the procedure for the immediate relocation to a hospital or a doctor's care of any person who may be injured on the jobsite.

B. Perform all necessary work to protect all personnel and the general public from hazard, including, but not limited to, surface irregularities or unramped grade changes, and trenches or excavations. Furnish barricades, lanterns, and proper signs to safeguard all persons and work.

C. There shall be no oil dripping from equipment or oil spills.

D. The material shall be stored and handled in a proper and safe manner and upon its use, immediately dispose of the containers, cans, rags, and remnants of the material in a manner approved by the City of Environmental Resources Management at the Contractor's sole cost. The Contractor is not allowed to store empty containers at the site. In case of any violation, the Engineer will report such violation to DERM, and the Contractor shall be subject to all penalties and fines as required by State and County regulations.

E. The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, shoring, logging, machinery guards and the like, shall be in accordance with the applicable governing safety authorities.

F. During construction, construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railings, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards. All such barriers shall have adequate warning lights as necessary, or required, for safety.

1.0.6. STORAGE OF HAZARDOUS MATERIALS

A. The material shall be stored and handled in a proper and safe manner and upon its use, immediately dispose of the containers, cans, rags and remnants of the material in a manner approved by the Department of Environmental Resources Management (DERM) at the Contractor's sole cost. The Contractor is not allowed to store empty containers at the site. In case of any violation, the Engineer will report such violation to DERM and the Contractor shall be subject to all penalties and fines as required by State and County regulations.

B. The Contractor is hereby cautioned that he cannot store any environmentally hazardous materials such as solvents, greases, lubricants or any other type of chemical substances at the Pump Station site. The Contractor shall be allowed to keep only such materials at the site for immediate use.

1.0.7. ACCIDENT REPORTS

A. If death, serious injuries, or series damage are caused, report the accident immediately by telephone or messenger to the Engineer. In addition, the Contractor must promptly report in writing to the Engineer and the City all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

B. If a claim is made by anyone against the Contractor or any Subcontractor on account of any accident, promptly report the facts in writing to the Engineer and the City, giving full details of the claim.

1.0.8. FIRE PREVENTION AND PROTECTION

A. Perform all work in fire-safe manner. Furnish and maintain on the site adequate firefighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

1.0.9. HURRICANE PREPAREDNESS

A. During such periods of time as are designated by the United States Weather Bureau as being a hurricane alert, the Contractor shall perform all precautions as necessary to safeguard the work and property, including the removal of all small equipment and materials from the site, lashing all other equipment and materials to each other and to rigid construction, and any other safety measures as may be directed by the Engineer.

B. During the hurricane season, which runs from June 1st to November 30th, it may become necessary to suspend work due to an impending storm until the proper working conditions prevail. In the event of a tropical storm or hurricane, it is the Contractor's responsibility to secure the jobsite in anticipation of the storm.

C. Fifteen (15) days prior to beginning of construction, the Contractor shall submit to the City or designee a Hurricane Preparedness Plan. The plan shall outline the necessary measures that the Contractor proposes to perform in the event of a tropical storm or hurricane in order to protect all work, materials, and equipment from exposure and properly safeguard all components of the project.

D. Prior to the Start of Work: The Contractor shall submit for approval, a plan of action for the specific actions to be taken on this specific project during a hurricane warning. The Contractor shall ensure operation of the by-pass system, if applicable, during the storm event. Backup power shall be included in case of power failure from FPL, as needed.

E. Upon notification of Hurricane Watch:

1. Formal notification to all Contractors to prepare and submit for approval a Plan of Action for the specific actions to be taken on their particular projects.

F. Upon notification of a Hurricane Warning:

1. Formal notification to the Contractors to implement their approved plan of action to protect the project and the public.

2. For pipeline construction projects within the public right-of-ways, the Contractor will be notified by the Construction Manager Office to suspend his construction operations. The Contractor will backfill all open trenches, remove all construction equipment and materials from the right-of-way, remove unnecessary traffic barricades and signs, secure remaining barricades by "half burial" or "double sandbags".

G. Post Disaster Work: In the event of a disaster declaration by the local or state governing authorities, the City may choose to obtain the services of the Contractor to perform work made an imminent priority for the disaster event. The compensation for the additional work caused by the disaster shall be negotiated between the Engineer and the Contractor with written approval provided by both parties prior to mobilization at the designed location or locations. The value of the work performed shall be up to the original contract with contingencies and dedicated allowances.

1.0.10. JOINT SURVEY TO ESTABLISH AUTHENCITY OF POSSIBLE DAMAGE CLAIMS

A. The Contractor shall maintain vertical and horizontal survey control points on all structures and improvements, located in the vicinity of the work prior to beginning work, and shall periodically check the points for movements with copies provided to the Engineer, of the survey notes for each survey and a copy of the layout of the survey control points.

B. After the contract is awarded and before commencement of work, the Contractor shall perform a thorough examination of existing buildings, structures and other improvements in the vicinity of the work, as applicable, which might be damaged by his operations.

1. Examinations of existing structures, buildings, and other improvements in the vicinity of the work shall be done by the Contractor. The scope of the examination shall include cracks in the structures, settlement, leakage, and similar conditions. The City assumes no responsibility for pre-existing conditions of the structure.

2. Records in triplicate of all observations shall be prepared by the Contractor, photographs shall be taken by the Contractor signed and dated, with descriptive information and in the manner specified above. One signed copy of every

document and photograph will kept on file in the office of the Engineer. Video recording also required.

3. The above records are intended to be used as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the Contractor and the City, and will be a means of determining whether and to what extent damage, resulting from the Contractor's operations, occurred during the Contract work.

C. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such detective pavement exist prior to proceeding with any work in the vicinity. Preconstruction videos and digital pictures shall be taken with date stamps of the entire area of work. A copy of all such notices shall be forwarded to the City.

1.0.11. TRAFFIC – GENERAL

A. Traffic safety and traffic control devices shall be employed on all private and public construction work withing the public right-of-way. Such measures shall be established and provided in conformance with the following regulations and in conformance with the Miami-Dade County Public Works Manual.

B. For construction within the City's public right-of-way, the Contractor shall submit two sets of construction plans for review to the City of Opa-Locka Public Works Department.

C. All traffic control and warning devices so specified shall, unless otherwise specified by the City be furnished, installed according to the Miami-Dade County Public Works Manual, Part I, Standard Details traffic control and safety by an Uniformed Police Officer, when specified, shall by furnished by the Contractor.

D. The Contractor shall take necessary precautions to ensure complete protection to public health, welfare, and safety. Adequate protection and warning devices shall be placed at locations surrounding work areas to prevent injuries to public properties. Particular emphasis must be placed on safety devices for vehicular traffic. Any work areas that may create a hazard at night shall be well lighted form sunset to sunrise with lamps or lanterns visible from all approaches. All maintenance of traffic signals must be approved by the City.

1.0.12. TRAFFIC SAFETY AND ACCESS TO PROPERTY

A. Comply with all rules and regulations of the City, state, and County authorities regarding closing or restricting the use of public streets or highways. No public or

private roads shall be closed, except by express permission of the City and the controlling authority. Conduct the work to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved barricades, signs, and lights where necessary for the safety of the public. The convenience of the general public and residents and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.

B. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained with temporary asphalt that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Access to businesses, schools, and homes along the route of the work shall always be provided by the Contractor.

C. Supply flagmen and guards or Police when they are required by regulation, when deemed necessary for safety, or required by the Engineer. Flagmen and Guards shall be furnished with approved orange wearing apparel and other regulation traffic control devices.

D. The Contractor shall be responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route) traffic control and other provisions, throughout the project as required by the City.

E. Traffic shall be maintained according to corresponding typical traffic control details. No streets shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.

1.0.13. TRAFFIC CONTROL AND USE OF PUBLIC STREETS

A. The Contractor shall be responsible for traffic control as specified hereinafter. Any reference to the City, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas of streets or their departments, published regulations, permits, or data. Abide by all applicable laws, regulations and codes thereof, pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.

B. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control and other provisions, throughout the project as required by the City of Opa-Locka Public Works Department. Traffic shall be maintained according to corresponding typical traffic control details as outlined in the

Miami Dade County Public Works Manual. No street shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.

C. If required by the Traffic Division, employ the required number of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. If required for traffic control permits or agencies, the Contractor shall work odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction.

D. The Contractor shall provide all barricades and/or flashing warning lights necessary to warn motorist of the construction throughout the project.

E. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. Provide necessary access to all adjacent property during construction.

F. The contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Miami Dade County Public Works Manual. In addition, provide for the resetting of all traffic control and information signing removed during the construction period.

G. Where excavations are to be made in the vicinity of signalized intersections, attention is directed to the fact that vehicle loop detectors may have been embedded in the pavement. Verify these locations by inspecting the site of the work and by contacting the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via www.sunshine811.com). Any loop detector which is damaged, whether shown on the plans or not, shall be repaired or replaced to the satisfaction of the Traffic Division.

H. Notify the Traffic Division 24 hours in advance of the construction date, and 48 hours in advance of construction within any signalized intersection.

I. Temporary pavement will be required over all cuts in pavement areas, and also where traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed, and the swale or median area restored to their previous condition.

1.0.14. WORKING IN CONFINED SPACES

A. Where a Contractor needs to work in a confined space, the Contractor must comply with the General Industry, OSHA Confined Space Standard, 29 CFR 1910.146 or the equivalent Confined Space Standard in CFR 1926, Safety and Health Regulations for Construction Standards.

PART 2 PRODUCTS NOT

USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01018 ENVIRONMENTAL CONTAMINATION

PART 1 – GENERAL

1.0.1. ENVIRONMENTAL CONSIDERATINOS

A. For any work conducted in a contaminated area within the project boundaries where hazardous materials or hydrocarbons have been encountered, were previously known to exist, or is suspected by the Contractor or the City Inspector, the Contractor must comply with all applicable requirements of OSHA, EPA, FDEP and Miami-Dade County Regulatory and Environmental Resources Department.

1.0.2. SPECIALIZED CONSTRUCTION AREA

A. Specialized construction areas are defined as areas where contaminants are discovered and require construction by personnel qualified by training and equipped with personal protective equipment for such work.

B. Work in specialized construction areas shall be carried out by personnel qualified by training and equipped for such activities. These personnel shall be either subcontractors with licensing and certification as specialists in this type of construction

or the Contractor's own personnel who have taken and been certified as having passed the required training course(s). Licensing and certifications shall be submitted to the City for verification and shall in all cases be satisfactory to both the City and other authorities with jurisdiction. The Field Health and Safety Technician furnished by the Certified Industrial Hygienist or Environmental Engineer shall be present on the site during all construction in specialized construction areas unless the nature of the work is non-hazardous such that either the Site Specific Health and Safety Plan or the Certified Industrial Hygienist or Environmental Engineer authorizes his absence.

C. Disposal of any contaminated soils and/or groundwater must comply with all applicable federal, state and local requirements.

PART 2 – PRODUCTS

2.0.1. The Engineer of Record shall consult with the City regarding its requirement for material type (including pipe, fitting, gasket, valve interior coating, and the like) to be installed in contaminated areas. **PART 3 – EXECUTION** 3.0.1. INSTALLATION REQUIREMENTS

A. The requirements of this Section shall be closely adhered to in all cases where proposed mains are to be installed in an area of hydrocarbon contamination. These requirements and those imposed by Miami-Dade County Regulatory and Environmental Resources Department or any other agency having jurisdiction an addition to, and take precedence over the City's standard specifications and standard details for ductile iron mains.

B. Contaminated backfill cannot be placed back into an existing trench. Contaminated fill shall be replaced with clean fill, hauled offsite and legally disposed of at a location which can handle the material.

C. The City may require gasketed joints be protected by encasing the entire joint with a hydrocarbon impermeable material. In this case, all joint gaskets shall be protected including those on pipe, fittings, valves, fire hydrants and specialty items.

END OF SECTION

01025 MEASUREMENT AND PAYMENT

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Payment for the various items in the Schedule of Payment items, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, taxes, materials, commissions, transportation and handling, bonds, permit fees, insurance, overhead and profit, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work, all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). Such compensation shall also include payment for any loss or damages arising directly or indirectly from the work.

B. The Contractor's attention is called to the fact that the quotations for the various items of work are intended to establish a total price for completing the work in its entirety. Should the Contractor feel that the cost for any item of work has not been established by the Schedule of Payment items or this Section, it shall include the cost for that

work in some other applicable bid item, so that its proposal for the project does reflect its total price for completing the work in its entirety.

1.0.2. SUBMITTALS

A. Informational:

1. Schedule of Values: Submit schedule on City's form.

2. Application for Payment.

3. Final Application for Payment.

B. Submittals shall be in accordance with Section 01300 "Submittals" and the City's standards.

1.0.3. SCHEDULE OF VALUES

A. Prepare a schedule of values for the work.

B. Unit Price Work: Reflect unit price quantity and price breakdown from conformed Bid Form.

C. Lump Sum Work:

1. Reflect schedule of values format included in conformed Bid Form.

2. List Bonds and insurance premiums, mobilization, demobilization, facility startup, and contract closeout separately.

D. An unbalanced or front-end loaded schedule will not be acceptable.

E. Summation of the complete schedule of values representing all the work shall equal the Contract Price.

F. The Contractor shall submit a Schedule of Values for review with the return of the executed Agreement to the Owner. The schedule shall contain the installed value of the component parts of work for the purpose of making progress payments during the construction period.

G. The schedule shall be given in sufficient detail for proper identification of work accomplished. The Schedule of Values shall directly correlate to each activity outlined in the construction progress schedule and the construction network analysis (specified in the section entitled "Submittals") to accurately relate construction progress to the requested payment. Each item shall include its proportional share of all costs including the Contractor's overhead, contingencies and profit. The sum of all scheduled items shall equal the total value of the Contract.

H. If the Contractor anticipates the need for payment for materials stored on the project site or off-site in bonded warehouse, it shall also submit a separate list covering the cost of materials, delivered and unloaded with taxes paid. This list shall also include the installed value of the item with coded reference to the work items in the Schedule of Values. Payment for stored materials shall comply with requirements of General Conditions.

1.0.4. APPLICATION FOR PAYMENT

A. Transmittal Summary Form: Attach one Summary Form with each detailed Application for Payment and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.

B. Use detailed Application for Payment Form provided by the City.

C. Include accepted schedule of values for each portion of work and the unit price breakdown for the work to be paid on unit price basis, and a listing of Owner-selected equipment, if applicable, and allowances, as appropriate.

D. Preparation:
   1. Round values to nearest dollar.

   2. List each Change Order and Written Amendment executed prior to date of submission as separate line item. Totals to equal those shown on the Transmittal Summary Form.

   3. Submit Application for Payment, including a Transmittal Summary Form and detailed Application for Payment Form, a listing of materials on hand as applicable, and such supporting data as may be requested by Owner.

1.0.5. MEASUREMENT—GENERAL

A. Weighing, measuring, and metering devices used to measure quantity of materials for work shall be suitable for purpose intended and conform to tolerances and specifications as specified in National Institute of Standards and Technology, Handbook 44.

B. Whenever pay quantities of material are determined by weight, material shall be weighed on scales furnished by Contractor and certified accurate by state agency responsible. Weight or load slip shall be obtained from weigher and delivered to the City or City's representative at point of delivery of material.

C. If material is shipped by rail, car weights will be accepted provided that actual weight of material only will be paid for and not minimum car weight used for assessing freight tariff, and provided further that car weights will not be acceptable for material to be passed through mixing plants.

D. Vehicles used to haul material being paid for by weight shall be weighed empty daily and at such additional times as required by the City. Each vehicle shall bear a plainly legible identification mark.

E. Materials that are specified for measurement by the cubic yard measured in the vehicle shall be hauled in vehicles of such type and size that actual contents may be readily and accurately determined. Unless all vehicles are of uniform capacity, each vehicle must bear a plainly legible identification mark indicating its water level capacity. Vehicles shall be loaded to at least their water level capacity. Loads hauled in vehicles not meeting above requirements or loads of a quantity less than the capacity of the vehicle, measured after being leveled off as above provided, will be subject to rejection, and no compensation will be allowed for such material.

F. Where measurement of quantities depends on elevation of existing ground, elevations obtained during construction will be compared with those shown on drawings. Variations of 1 foot or less will be ignored, and profiles shown on drawings will be used for determining quantities.

G. Units of measure shown on Bid Form shall be as follows, unless specified otherwise. All methods of measurement shall be approved by the City.

Item	**Method of Measurement**
AC	Acre – Field Measure
CY	Cubic Yard – Field Measure within limits specified or shown, or measured in vehicle by volume, as specified
EA	Each – Field Count
GAL	Gallon – Field Measure
HR	Hour

LB	Pound(s) – Weight Measure by Scale
LF	Linear Foot – Field Measure
LS	Lump Sum – Unit is one; no measurement will be made
SF	Square Foot
SY	Square Yard
TON	Ton – Weight Measure by Scale (2,000)

1.0.6. MEASUREMENT AND PAYMENT

A. General:

1. Payment for all the work completed under this Project shall be made in accordance with the provisions of the "Special Conditions" on the basis of the specific provisions of this section of the Specifications.

2. The Contractor will be paid each month the value of the work completed during the preceding month (less retainage) and the invoiced cost including applicable sales taxes and shipping value (less retainage) of materials not already used, but which have been furnished by the Contractor under the Specifications, provided that such materials have been delivered, properly stored and inspected by the Engineer and that payment therefore has been satisfactorily certified by the Contractor to the Engineer. Remaining cost for materials (less retainage) will be paid at the same time as installation. Any payment for materials which are not used will be withheld from the final payment.

3. The Contractor shall receive and accept the compensation as provided in the Quotation, the ITB and "Invoices and Payments" of the "Special Conditions" as full payment for furnishing all labor, materials, tools and equipment, for performing all operations necessary to complete the work under this Contract, and also in full payment for all loss or damages arising from the nature of the Work, or from the action of the elements or from unforeseen difficulties which may be encountered during the prosecution of the work until the final acceptance by the City.

4. The cost breakdown (or Schedule of Values) referred to herein is defined in "Schedule of Values" of the "Special Conditions." The cost breakdown (Schedule of Values) approved by the Engineer will be used as the basis for making progress payments and for determining the cost of extra work which is the same or similar (as determined by the Engineer) to that defined in the "Schedule of Values."

5. The prices stated in the Quotation includes full compensation for overhead and profit, all costs and expenses for taxes, labor, equipment, furnishing and repairing small tools and ordinary equipment, mobilization, home office expenses and

general supervision, materials, commissions, transportation charges and expenses, patent fees and royalties, bond, insurance, labor for handling materials during inspection, together with any and all other costs and expenses for performing and completing the work as shown on the Plans and specified herein. In addition, the Contractor shall include the actual cost of social security taxes, unemployment insurance, worker's compensation, fringe benefits, inclusive of life and health insurance, union dues, pension, pension plans, vacations, and insurance and contractor's public liability and property damage insurance involved in the work based on the actual wages paid to such labor and all other general costs and profits, prorated to each item.

6. Unless otherwise specifically stated elsewhere herein, the Contractor shall include in the prices bid all materials, electrical supply, fuel, lubricants, temporary equipment, temporary wiring, temporary piping and fittings, pumps, gages, and all other items of whatever nature required to completely test, balance, disinfect if required, and put into fully operational condition all equipment and/or systems supplied by either the City or the Contractor and installed as a part of this Project. Further, any test materials supplied by the Contractor shall be completely satisfactory to the City. Any decision as to whether a particular material is suitable for test purposes shall be at the sole discretion of the Engineer whose decision shall be final. Any material considered not suitable shall be immediately replaced by the Contractor with suitable material and no extra compensation will be allowed."

7. It is the intent of the City to obtain a complete and working installation under this Contract, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

8. For purposes of determining the monthly payments to be made to the Contractor for work accomplished, the value of the work completed shall be determined in the following manner:

    a. Demolition, installation of pipe culvert shall constitute seventy-five percent **(75%)** of the price bid for these Quotation Items.

    b. Submittal of the PSM's daily progress reports and/or field book notes and monthly as-builts of the work that has been performed to date (all documents subject to approval and acceptance by the City) shall constitute ten percent **(10%)** of the price bid for these Quotation Items.

    c. Completion of all sitework restoration, shall constitute five percent **(5%)** of the price bid for these Quotation Items.

d. Submittal of the final as-builts to the satisfaction of the Engineer, completion of all surface repairs, restoration of public or private facilities, appurtenances, and all other work not provided for under other Quotation Items shall constitute the remaining ten percent **(10%)** of the price bid for these Quotation Items.

B. Price Bid:

1. The price bid for each item shall be stated in both words and figures in the appropriate places in the Quotation form. All blank spaces for bid prices must be filled in with ink, or with a typewriter. The Bidder is further directed that any and all alterations, changes, corrections and modifications, made to the Quotation forms prior to submission of bids, must be initialed by the Bidder. Non-compliance by the Bidder of this directive may be grounds for rejection of his bid.

2. In the event that there is a discrepancy between the price written in words and the price written in numbers, the price written in words shall govern except where the number of units multiplied by the unit price shown in numbers equals the total price for that bid item. In such case the unit price shown in numbers shall govern over the unit price shown in words.

3. Where an error is made in the calculation of the total bid price of an item, the unit price shall govern.

4. If the bidder makes an error in his addition of the total bid prices of the applicable items in the Quotation, the correct sum of its applicable bid item totals shall be the Total Bid.

5. It has been determined that the City is not exempt from the payment of Florida State Sales Tax under this Contract. All items of materials, equipment and supplies furnished by the Contractor and remaining a part of the completed Project are subject to this Tax. The Bidder shall include a sufficient amount of money to pay for this Tax in his bid price. Sufficient money to pay the Tax for all miscellaneous materials and minor items shown on the Plans, specified herein, or necessary for the work, and which will remain a part of the completed Project, shall also be included in the price or prices bid, and no other compensation will be provided.

C. Quotation Items:

It is intended that all work required to complete this Project will be included in the various bid items as follows:

Item No. 1

For performing preparatory work and operations in mobilizing for beginning the work of the Project, including preparation and acceptance of Maintenance of Traffic Plan (MOT), but excluding materials and permit costs, both of which are paid under other payment items, shall include, but not be limited to; preparation, submission and acceptance of the MOT, first by the City and if acceptable to the City, submission to and acceptance by all other governing authorities; supply, submission and correction of all "Pre-Approved Product Lists" and/or shop drawings; ordering the said equipment and materials in a timely fashion; those operations necessary for the movement of personnel, equipment, supplies and incidentals to the Project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities; the cost of reestablishing the design baseline, vertical control points and reference points, and establishing proposed pipeline location; the cost of MOT and permit preparation/submission/acceptance; the costs of bonds, required insurance and other preconstruction expense but excluding the actual cost of permits, which are paid under a separate dedicated allowance account and excluding the cost of materials which are paid under another bid item(s).

Not inclusive of the costs incurred in the provision of traffic control and the costs incurred in the provision of off-duty police officers that are to be paid for under separate Bid Items.

The mobilization item will be paid in the following manner:

Contracts with a contract duration of up to and including one hundred twenty (120) calendar days will be paid in two (2) separate payments, each equal to fifty (50) percent of the amount bid for this item.

Contracts with a contract duration of over one hundred twenty (120) calendar days will be paid in four (4) separate payments, each equal to twenty-five (25) percent of the amount bid for this item.

The two or four payments will be made with the first two or four payment draws and is conditioned upon progress satisfactory to the Engineer being made pursuant to the accepted Project.

The total amount of the partial payments may not exceed ten (10) percent of the original Subtotal of the bid items. Any remaining amount will be paid upon completion of all work on the Contract. Retainage, as specified in the "General Covenants and Conditions" and any Special Provisions will apply to these payments.

Since this item is bid as an aggregate sum, payment will be in accordance with the cost breakdown as approved by the Engineer and measured as required by and satisfactory to the Engineer.

Item No. 2

For furnishing and delivering to the City Ultraflo SRASP Barrell Pipe for culverts, or approved equal, of the nominal sizes specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer, which payment shall be full compensation for furnishing Ultraflo SRASP Barrell Pipe, and joint materials; corporation stops pipe bedding; backfill materials; temporary pavement materials; transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Item No. 3

For installing Ultraflo SRASP Barrell Pipe for culverts, or approved equal, of the nominal sizes specified in these bid items will be paid for at the unit price bid times the number of linear feet installed and accepted by the Engineer. The price per foot for installing the pipe shall be full compensation for the completed pipeline, ready for service, and shall include, but not be limited to; exploratory excavation; excavation; sheeting and shoring if necessary; complying with the Florida Statutes "Trench Safety Act"; transporting and unloading the pipe and all other materials not specified in other bid items from delivery trucks at the job site (excavation side) and placing them into position in the trench; installing Ultraflo SRASP Barrell Pipe, installing joint materials; installing joint; removal and disposal of excess or unsuitable fill material, where required; maintaining access to residences and businesses along the route of the main; protecting existing utilities along the route of the culvert; making temporary paving repairs; complying with work hour restrictions; satisfying all requirements of the Project permits; preparation and submittal of PSM's daily progress reports and/or field notes and monthly as-builts of the work that has been performed to date; moving and replacing utilities, fences, trees, landscaping, shrubs, mail boxes, sprinkler systems, shoulders, asphalt paths, curb & gutter, asphalt and plain concrete driveways, traffic separators and all other similar items, to original locations and to equal or better than original conditions; and all other appurtenant and miscellaneous items and work (not included in another bid item) including final cleanup for a complete, satisfactory and functional installation.

Items No. 4

For furnishing and delivering General Guardrail per FDOT index No. 536 with mechanical appurtenances required as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer, which payment shall be full compensation for furnishing General Guardrail per FDOT index No. 536; transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Items No. 5

For installing General Guardrail per FDOT index No. 536 with mechanical appurtenances required as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer, which payment shall be full compensation for furnishing General Guardrail per FDOT index No. 400; transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Items No. 6

For demolishing and removal of the existing Culvert with headwalls as indicated in the plans, will be paid for from the aggregate sum amount established by the Contractor for this purpose. Such amount represents the amount the Contractor feels is necessary to completely demolish the existing concrete stair and chain-link fence and dispose of the debris generated. Asphalt restoration is included in a separate item.

Since this item is bid as an aggregate sum, no other special provisions for measurement will be necessary.

Item No. 7

For excavating of existing backfill material at existing Culvert location, will be paid for at the unit price bid times the number of cubic yards removed to the satisfaction of the Engineer, and includes removal of unsuitable material, loading, hauling, legal disposal off-site and tipping fees.

Item No. 8

For providing bypass pumping, as needed, to ensure Canal flow is uninterrupted throughout construction, will be paid for from the aggregate sum amount established by the Contractor for this purpose. Such amount represents the

amount the Contractor feels is necessary to completely ensure Canal flow is uninterrupted throughout construction.

Since this item is bid as an aggregate sum, no other special provisions for measurement will be necessary.

Item No. 9

For furnishing and delivering all necessary Turbidity Barriers for erosion control measures specified on plans, as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer for this purpose, which payment shall be full compensation for furnishing and installing all necessary Turbidity Barriers for erosion control measures specified on plans, transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Item No. 10

For furnishing and delivering all necessary Drop Inlet Sediment Protections for erosion control measures specified on plans, as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer for this purpose, which payment shall be full compensation for furnishing and installing all necessary Drop Inlet Sediment Protections for erosion control measures specified on plans, transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Item No. 11

For selling and delivering concrete for the installation of 8-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, will be paid for at the unit price bid times the number of cubic yards of concrete placed. The price shall be full compensation for furnishing concrete for the installation of 8-inch thick Concrete Pavement (min. 3,000 psi at 28-day), transportation and handling costs delivered ditchside. This bid item shall be used only at locations approved by the Engineer or indicated in the Plans where the minimum cover over the main cannot be obtained.

Item No. 12

For constructing 8-inch Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, will be paid for at the unit price bid times the number of cubic yards

of concrete placed. The price shall be full compensation for all work including furnishing all labor, equipment, and materials required for constructing the 8-inch Concrete Pavement. This bid item shall be used only at locations approved by the Engineer or indicated in the Plans where the minimum cover over the main cannot be obtained.

Item No. 13

For constructing concrete 4-inch-thick sidewalk and ramp curbing to match existing per FDOT index No. 310, will be paid for at the unit price bid times the number of square feet of such sidewalk required, installed and accepted by the Engineer, and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete installation.

Item No. 14

For constructing concrete curb and gutter restoration to match existing as per FDOT index No. 300, will be paid for at the unit price bid times the number of square feet of such curb and gutter required and placed as measured along the curb, installed where directed by the Engineer, and the price bid shall be full compensation for furnishing all labor and equipment for a complete installation.

Item No. 15 - Contingent Item

For furnishing and installing additional suitable backfill material, will be paid for at the unit price bid times the number of cubic yards of additional trench backfill furnished and installed as directed by the Engineer in the field and includes removal of unsuitable material, loading, hauling, legal disposal off-site and tipping fees. The additional trench backfill shall be measured along the main within the limits of the trench as defined by the County's Standard Details appended hereto. The use of additional trench backfill shall be paid for only when and where approved by the Engineer prior to installation.

Item No. 16

For furnishing and installing rubble (Broken Stone), including necessary geotextile filter fabric, at Culvert embankment for the rip-rap installation as per FDOT Standard Specifications Manual Section No. 530, will be paid for at the unit price bid times the number of tons of such rip-rap required as directed by the Engineer in the field and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete installation.

Item No. 17

For furnishing and installing sand-cement bags at Culvert embankment for the riprap installation as per FDOT index No. 530, will be paid for at the unit price bid times the number of Cubic Yards of such rip-rap required as directed by the

Engineer in the field and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete installation.

Item No. 18

For furnishing and constructing concrete endwalls at Culvert pipe barrels per FDOT index No. 430-032, will be paid for at the unit price bid times the number of cubic yards of concrete placed. The price shall be full compensation for all work including furnishing all labor, equipment, and materials required for constructing the concrete enwall at Culvert pipe.

Item No. 19

For furnishing and constructing concrete shoulder barrier as per FDOT index No. 521-001, will be paid for at the unit price bid times the number of linear feet of shoulder barrier installed, as indicated in plans. The price shall be full compensation for all work including furnishing all labor, equipment, and materials required for constructing the concrete shoulder barrier.

Item No. 20

For cold milling roadway surface course for permanent pavement repairs (nominal 1 inch thick), will be paid for at the unit price bid times the number of square yards of such surface course milled and required as measured along the curb within the limits defined by details on the Plans and/or the City's Public Works Manual appended hereto and as approved by the Engineer. Greater widths are at the Contractor's option and expense. The price bid shall be full compensation for furnishing all materials, labor and equipment required for milling of surfaces indicated. Asphalt cold milling shall be performed using an automated pavement planer capable of maintaining an accurate depth. Cold milling equipment shall meet the approval of the Engineer and the governing agency having jurisdiction at the location of the pavement milling operation. The Engineer's word as to the acceptability of the equipment shall be final.

Item No. 21

For constructing **Type "V"** permanent pavement repairs for roadway (nominal 1 inch thick machine-laid asphaltic concrete friction surface overlay) will be paid for at the unit price bid times the number of square yards of overlay, installed where directed by and to the satisfaction of the Engineer, which price shall be full compensation for furnishing all labor, material, and equipment for a complete installation; and shall include asphalt pavement driveways in roadways, as required and directed by the Engineer. After the pavement has been milled and the existing pavement removed, a tack coat shall be applied as specified above. The latest applicable standard for the friction course from the governing authority shall be used. Temporary pavement markings for roadways shall be included in this bid item.

Item No. 22

For replacing pavement markings damaged, removed or obliterated by Contractor's operation, will be paid for from the unit price bid times the number of pavement markings for this purpose. Such amounts represent the amount the contractor feels is necessary to comply with the governing agency's requirements. Any portion of this fund, remaining after the work has been paid for will remain with the Contractor. Conversely, no requests for additional reimbursement will be approved. Reflective Pavement Markers shall also be furnished and installed under this item and there will be no additional compensation paid for this work.

Since this item is bid as an aggregate sum, no other special provisions for measurement will be necessary.

Item No. 23 - Contingent Item

For restoring sodded areas, will be paid at the unit price bid times the number of square yards of sod placed, and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete restoration.

Item No. 24

For furnishing traffic control, will be paid for from the aggregate sum amount established by the Contractor for this purpose. Such amount represents the amount the Contractor feels is necessary to provide sufficient flagmen, signs, barricades, and similar items and work for directing traffic and maintaining safety during all times of work and other times as directed by the Engineer, FDOT, the municipalities' Public Works Department and any other governing authority. Any portion of this fund remaining after all authorized payments have been made will remain with the Contractor. Conversely, no requests for additional payments will be approved.

Payment to the Contractor under this item will be by monthly percentage corresponding to the percentage of the Project's work items completed and paid for each month, as approved by the Engineer.

Item No. 25 - Contingent Item

For sheeting and shoring ordered left in place by the Engineer, will be paid for at the unit price bid per square foot, measured from tip to cut-off times the horizontal length, regardless of thickness, times the number of linear feet of sheeting and shoring left in place as accepted by the Engineer. Payment shall be full compensation for cutting off and for all salvage and potential reuse value of the material. Sheeting and shoring left in place without the Engineer's approval will be at the Contractor's expense.

Item No. 26- Contingent Item
For removal, transport, and legal disposal of unsuitable backfill materials, including tipping fees, will be paid for at the unit price bid times the number of cubic yards removed and legally disposed of, as measured by the truckload to the satisfaction of the Engineer.

Item No. 27 – SUBTOTAL
Sum of Item Nos. 1 through 27.

Item No. 28 - Dedicated Allowance
This item establishes a fund for reimbursement of the cost of providing off-duty police officers as required for this project. Payment shall only reimburse the Contractor for the cost of the off-duty police officers for hours on duty at the work site; no overhead, travel time or other additional costs will be allowed. Any portion of this fund remaining after all authorized payments have been made will be withheld from contract payment and will remain with the City.

Item No. 29 - Dedicated Allowance
This item establishes a fund for reimbursement of the cost of all required construction permits and fees, if authorized by the Engineer. Payment shall reimburse the Contractor for only the cost of the construction permit and fee. Any question or whether a construction permit or fee is required shall be decided by the Engineer whose word shall be final. Any portion of this fund remaining after all authorized payments have been made will be withheld from Project payments and will remain with the City.

Item No. 30 - Contingency Allowance
For unforeseen conditions, minor construction changes and Quantity Adjustments, additional work not covered by other items, if ordered by the Engineer.

This account is for all labor, materials, equipment and services necessary for modification or extra work required to complete the Project due to unforeseen conditions, unforeseen conflicts between existing elements of work and the proposed work; for minor changes required to resolve any unforeseen conditions, Revised Regulations, Technological and Products Development, Operational Changes, Schedule Requirements, Program Interface, Emergencies and other Miscellaneous Costs; and for adjustments to estimated quantities shown on the unit prices of the Quotation to conform to actual quantities installed; and associated time related to this work only if ordered by the Engineer.

Payment to the Contractor under the Contingency Allowance will only be made for work ordered in writing by the Engineer, in accordance with Section 13 "Extra Work and Payment Therefore" of the "General Covenants and Conditions." Any portion

of these accounts remaining after all authorized payments have been made will be withheld from Contract payments and will remain with the City.

A non-compensable time extension shall be included in the Contingency Allowance work when approved by the Engineer.

Item No. 31 - TOTAL BID

Sum of Item Nos. 27, 28, 29 and 30.

Note:

Since Item Nos. 15, 23, 25 and 26 are Contingent Items, and because of the nature of the Dedicated Allowance, Item Nos. 28 and 29, and the Contingency Allowance, Item No. 30, they may or may not be used at the option of the City. Any overrun or under run provisions contained within the Project Documents shall not be applicable to these items.

1.0.7. NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

A. Payment will not be made for following:

1. Loading, hauling, and disposing of rejected material.

2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.

3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.

4. Material not unloaded from transporting vehicle.

5. Defective work not accepted by Owner. Material remaining on hand after completion of work.

1.0.8. PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

A. Partial Payment: No partial payments will be made for materials and equipment delivered or stored unless shop drawings or preliminary operation and maintenance manuals are acceptable to the Engineer.

B. Final Payment: Will be made only for products incorporated in work; remaining products, for which partial payments have been made, shall revert to Contractor

unless otherwise agreed, and partial payments made for those items will be deducted from final payment.

1.0.9. ALLOWANCES

A. The allowances shall be used only at the discretion of and as ordered by the Owner for such items as unforeseen conditions, unforeseeable conflicts between existing elements of work and the proposed work, unit price items exceed estimated quantities, and any associated work requested by the Owner including all labor, materials, and services for modifications or extra work to complete the project that was anticipated, but not specifically included in this Contract.

B. Any portion of these allowances that remain after all authorized payments have been made will be withheld from contract payments and will remain with the Owner.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01031 GRADES, LINES AND LEVELS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The work of this Section comprises the establishing of grades, lines and levels.

1.0.2. RELATED WORK

A. Section 01720 "Project Record Documents"

PART 2 – PRODUCTS

2.0.1. MATERIALS

A. Furnish all stakes, templates and other materials necessary for establishing and maintaining of the lines and grades necessary for control and construction of the work and all incidental labor necessary for the prosecution of the work. **PART 3 – EXECUTION**

3.0.1. LAYOUT OF THE WORK

A. GENERAL

1. The Engineer of Record, through retaining the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida, shall furnish the Contractor with horizontal and vertical controls which shall be utilized as specified elsewhere herein to layout the work. The Professional Land Surveyor and Mapper, who is licensed in the State of Florida hired by the Contractor, shall verify all controls provided by the Engineer of Record and it shall be the responsibility of the Contractor to preserve same.

2. The Contractor shall retain the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida who, shall furnish and set stakes, establishing line and grade and shall solely be responsible for the layout of the work as well as the recording of all as-built dimensions and elevations. The Contractor shall furnish all additional stakes, templates, and other materials for marking and maintaining survey points and lines given, and shall be responsible for their preservation. Should any of the horizontal and vertical control points set by the Engineer of Record be destroyed or disturbed, they shall be reset by the Contractor's Florida Registered Land Surveyor and Mapper, at the Contractor's expense. All control points previously set by the Engineer of Record shall be verified by the Contractor's surveyor.

B. LAYOUT

As provided in Subsection 3.01-A, above, the Contractor through the services of his Florida Registered Land Surveyor and Mapper, shall establish the line and bench mark and other reference points for the pipeline or structure, as follows:

1. Structures: Will consist of baselines, stakes at building corners, centers and centerlines, auxiliary lines and two bench marks from which to establish the

elevations. The Engineer of Record shall set a minimum of three horizontal and vertical control points which shall thereafter be maintained by the Contractor, without further help from the Engineer of Record, for use in establishing and checking the lines and grades as shown on the contract drawings.

2. Pipelines: Will consist of baselines, construction lines, centerlines, auxiliary lines and bench marks from which to establish the elevations. The Engineer of Record shall set horizontal and vertical control points at the beginning and end of the work and at a minimum distance of 1,400 ft. in between. When the total distance is less than 1,400 ft. control points shall be set at the beginning and end of the work.

3. The Contractor shall use this information to construct the structures and pipelines to the lines and grades shown on the project drawings and shall supply all equipment and personnel necessary to accomplish this end.

4. For pipelines, this will consist of establishing all points of bend (but not necessarily bevel pipe unless in close proximity to other facilities), valves, tees, crosses and other stations not more than 100 feet apart along the proposed centerline of the pipe, or along a stationed offset line as shown on the plans, marked by a nail in a metal cap if in pavement, with the station painted nearby or by a nail in the top of a wooden stake driven flush with the ground with the station marked on the flag stake nearby, if not in pavement.

5. The Contractor shall supply the City Inspector with a copy of the Florida Registered Land Surveyor and Mapper's layout of the work immediately upon its availability to his own forces.

6. The Contractor shall make his equipment and men available to the Inspector for spot checking the accuracy of the pipe laying. The Inspector shall require the Contractor to correct pipe alignment when necessary.

C. RECORD DRAWINGS:

1. During the entire construction operation, the Contractor shall retain the services of a State of Florida Registered Land Surveyor and Mapper who shall maintain records of the installation, including all deviations from the plans and specifications by obtaining "as-built" dimensions and elevations.

2. The Surveyor shall prepare Record As-Built Drawings showing correctly and accurately all changes and deviations made during construction, including approved construction variances, to reflect the work as it was actually constructed.

3. Refer to Sections 01720 and 01725 for City's criteria for developing project record documents and record As-Built drawings.

D. HORIZONTAL AND VERTICAL CONTROL FOR DESIGN

The following shall apply when establishing horizontal and vertical controls for design. They shall also be used for the development of construction drawings.

1. Survey stationing shall proceed from south to north and/or from west to east.

2. Baseline or centerline shall be tied to section corners, or to monument lines or to right of-way lines.

3. Points along the survey line shall be referenced to perpetuate the alignment. Whenever possible, the reference points shall be established at right angles to the survey line and at intervals no longer than 1,400 feet. Reference points shall be shown on construction plans.

4. Centerline of side streets shall be established and set by nail and disc. Station and angle turned shall be given and shown on the plans.

5. All curve data (horizontal) shall be shown on plans. Point of curvature and point of tangency shall be set in the field, reference P.C. and P.T. or P.I.

6. Easement lines shall be tied to baseline or centerline. Give station and angle turned.

7. Set centerline or baseline stations every 100 feet on the ground using iron rods in unpaved areas or P.K. nails on asphalt.

8. All vertical control and elevations shall be referenced to North American Vertical Datum of 1988 (NAVD 1988).

9. Temporary bench marks (T.B.M.) and bench marks shall be established throughout the project at approximately 1,000 feet intervals. Show information on plans.

10. Centerline shall be tied to baseline if different from each other.

11. Tie proposed pipe to centerline or baseline, not to right-of-way line. Right-of-way line shall be tied to centerline or baseline.

12. All survey information shall be shown on the plans.

13. All point of intersections and deflection angles shall also be shown. Angle can be submitted by bearings.

END OF SECTION

01070 ABBREVIATIONS

PART 1 - GENERAL

1.0.1. SCOPE OF WORK

A. Comply wherever in these specifications' references are made to the standards, specifications, or other published data of the various national, regional, or local organizations, such organizations may be referred to by their acronym or abbreviation only. As a guide to the user of these specifications, the following acronyms or abbreviations which may appear in these specifications shall have the meanings indicated herein.

B. It is the intent of the City to obtain a complete functional, and satisfactory installation under this Contract, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.0.2. ABBREVIATIONS AND ACRONYMS

A. The Contractor is also alerted that various "Standards" are used herein for reference and criteria, and that he should obtain copies for his general use and protection. Abbreviated titles are used throughout these Specifications and although most of them are widely known, their complete titles are given below in order to avoid any misunderstanding.

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute, Inc.
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association

FAC	Florida Administrative Code
FBC	Florida Building Code
FDOH	Florida Department of Health in Miami-Dade County
FDOT	State of Florida Department of Transportation
MDDTPW	Miami-Dade Department of Transportation and Public Works
NSF	NSF International
OSHA	Occupational Safety and Health Administration

B. The above list shall not be considered complete, as there are other "Standards" used; however, in most cases complete titles have been given.

C. Wherever "Standards" are indicated herein for reference, the referenced portion shall have the same force and effect as if it were included, herein, in its entirety, latest revision if the date of publication is not shown.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01090 REFERENCE STANDARDS

PART 1 – GENERAL

1.0.1. REFERENCE STANDARDS

A. Comply with the requirements of standard with date as specified herein. Standards without dates shall be understood as the Standard current at the time of bid. In case of conflict between the referenced standards, the one having the more stringent requirements shall govern.

B. In case of conflict between the referenced standards and the Project Documents, the Project Documents shall govern.

C. When no reference is made to a code, standard, or specification, the standard specifications of the ASTM, the ANSI, the ASME, the IEEE, or the NEMA shall govern.

1.0.2. QUALITY ASSURANCE

A. Application: When a standard is specified by reference, comply with requirements and recommendations stated in that standard, except when requirements are modified by the Contract Documents or applicable codes establish stricter standards.

1.0.3 ABREVIATIONS

A. Abbreviated titles for other governing standards are used throughout these specifications and although most of them are widely known, their complete titles are given below to avoid misunderstanding.

1. AA: Aluminum Association.

2. AAMA: Architectural Aluminum Manufacturer's Association.

3. AASHTO: American Association of the State Highway and Transportation Officials.

4. ACI: American Concrete Institute.

5. ACPA: American Concrete Pipe Association
6. AI: Asphalt Institute
7. AIA: American Institute of Architects AISC American Institute of Steel Construction
8. AISI: American Iron and Steel Institute
9. AITC: American Institute of Timber Construction
10. ANSI: American National Standards Institute, Inc.
11. API: American Petroleum Institute
12. ASCE: American Society of Civil Engineers
13. ASME: American Society of Mechanical Engineers
14. ASMM: Architectural Sheet Metal Manual
15. ASSE: American Society of Sanitary Engineers
16. ASTM: American Society for Testing and Materials
17. AWS: American Welding Society
18. AWWA: American Water Works Association
19. BHMA: Builders Hardware Manufacturer's Association
20. CIPRA: Cast Iron Pipe Research Association
21. CLFMI: Chain Link Fence Manufacturers Institute
22. CMA: Concrete Masonry Association
23. DIPRA: Ductile Iron Pipe Research Association
24. ETL: Environmental Test Laboratories

25. FDEP: Florida Department of Environmental Protection

26. FDOT: Florida Department of Transportation

27. IEEE: Institute of Electrical and Electronics Engineers

28. NBS: National Bureau of Standards

29. NEC: National Electrical Code

30. NEMA: National Electrical Manufacturer's Association

31. NFPA: National Fire Protection Association

32. OSHA: Occupational Safety and Health Administration

33. SSPC: Steel Structures Painting Council

34. SSPWC: Standard Specifications for Public Works Construction

35. SFWMD: South Florida Water Management District

36. UL Underwriters Laboratories, Inc.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01100 SPECIAL PROJECT REQUIREMENTS

PART 1 – GENERAL

1.0.1. RESPONSIBILITY OF THE CONTRACTOR

A. The Contractor shall have at all times as his agent on the site of the work a competent superintendent capable of reading and thoroughly understanding the plans and specifications.

B. The Contractor shall be responsible for the good condition of the work or materials until formal release from his obligations under the guidelines of this project. The Contractor shall store materials and shall be responsible for and shall maintain partly or wholly finished work during the continuance of the Contract. The Contractor shall place sufficient lights and danger signals on or near the work from sunset to sunrise; shall erect suitable railings or other protective devices about unfinished work, open trenches, embankments, or other obstructions; shall provide all necessary watchmen on the work by day or by night for the safety of the public and shall take all necessary precautions for preventing accidents or injuries to persons or property in or about the work.

C. The Contractor shall be responsible for the coordination, location, and relocation of utilities, including but not limited to utility light poles, cables, fiber optic lines, water

mains and services, sewer mains and services, electrical, telephone and television cables, signals and signal poles, fences, guard rails, piping, culverts, conduits and drains that interfere with the positioning of the work as set out on the drawings. The cost of all such coordination and relocations shall be included in the bid for the project and shall not result in any additional cost to the City.

D. Prior to proceeding with trench excavation, the Contractor shall contact all utility companies and all other users of the right-of-way in the area to aid in locating their underground services. It shall be the Contractor's responsibility to contact utility companies at least three NORMAL WORKING DAYs before starting construction. The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground utilities may be determined.

E. Wherever piping systems or utilities such as water, wastewater, air, chemical, electrical or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the drawings. Approximate locations of known installations in the vicinity of new work must be verified in the field by the Contractor, who shall uncover them carefully, prior to commencement of the work.

F. The Contractor shall be familiar with all codes and regulations of the Federal Government, the State of Florida, Miami Dade County, the City of Opa-Locka and any municipal corporations applicable to every aspect of the project. The Contractor shall provide all materials and shall perform all work necessary to fully comply with all provisions and requirements of applicable codes and regulations whether specifically indicated in the plans and specifications or not. It is the intent of the City to obtain a finished project in full compliance with all requirements of any agencies having jurisdiction over any portion of the work involved in the project. The Inspector will not recommend acceptance of the work until all requirements and provisions of pertinent codes and regulations have been satisfactorily fulfilled.

G. Changing the grade of the proposed main by rising deflections, or the alignment by horizontal deflections, will not be considered as extra work, or extra cost, to the Contractor, and in some cases a credit to the City may be warranted.

H. Any Conflicts between the field investigation and the information shown on the plans shall be brought to the immediate attention of the Engineer.

1.0.2. LAND FOR CONSTRUCTION PURPOSES

A. The Contractor shall limit operations, temporary facilities and storage of equipment and materials to on-site areas to be designed by the Engineer.

B. Should the Contractor require additional space he/she shall make his own arrangements for storage of materials and equipment in locations off the construction site. For the allocated space, submit to the Engineer for approval, proposed plan and layout for all temporary facilities, offices, storage facilities, temporary water service and distribution, and temporary power service and distribution. Prior to commencing any new construction remove, relocate and protect where necessary all existing underground and above ground facilities, pipelines, utility systems, plantings and all other existing installations. All of these existing features shall be restored to their initial or better than initial conditions.

1.0.3. PRE – CONSTRUCTION CONFERENCE

A. After the Award of Contract and prior to the issuance of the "Notice to Proceed," a preconstruction conference will be held with the Contractor, the City, various utility companies and others who are interested in the Project for the purpose of coordinating the work. The time and place of meeting will be set by the Engineer.

B. In some cases the preconstruction conference may be held after the start work date stated in the written "Notice to Proceed." This may be due to difficulty with coordination of all parties concerned, or other similar reasons.

C. Such delays in holding the preconstruction meeting will not relieve the Contractor of any responsibilities hereunder, and will not be an acceptable reason for him to request additional work completion time beyond that provided since he can be obtaining permits, mobilizing his equipment and forces, ordering materials, performing minor work, or other work if approved by the Engineer, during the interim period.

D. Prior to the preconstruction conference, the Contractor shall prepare the construction schedule as described in Section 01120 - Sequence of Construction and General Information and Section 01200 - Project Meetings, "Project Scheduling" and provide copies of the same to others in attendance.

E. The construction schedule shall include the place of beginning, the proposed order of progression, together with the estimated times for beginning and completing the various items of work. In addition, the Contractor shall prepare on electronic media, a critical path method (CPM) with emphasis made to "construction time and completion."

F. The Engineer will discuss requirements of such matters as project supervision and inspections, progress schedules and reports, Contract Change Orders, insurance, safety, and other items pertinent to the Project.

G. All parties to this conference should be prepared to discuss any problems anticipated with the execution of the work under this Contract.

1.0.4 SAFETY REQUIREMENTS

A. The Contractor shall comply with the Department of Labor Safety & Health Regulations for construction promulgated under the Occupational Safety & Health Act of 1970, (PL 91-596).

B. Comply with all applicable provisions of the Occupational Safety and Health Act (OSHA). The Contractor's Manual of Safety Practices, dealing with the firm's policies on field safety procedures for employees shall be submitted to the Engineer for review before Notice to proceed will be issued.

C. Conduct operations in such a manner, utilizing warning devices, such as traffic cones, barricades and warning lights, that traffic and pedestrians are given adequate warning of hazard of the work site as may be deemed necessary by the City and/or the Engineer.

D. Certain products specified in these specifications contain warnings by the manufacturer that under certain conditions, if instructions for use of the product are no followed, a hazardous condition may develop. It is the Contractor's responsibility to instruct its workmen in the safe use of the product, or any product substitution.

E. For trench excavations in excess of five feet in depth, the Contractor shall comply with the provisions of the State of Florida "Trench Safety Act".

F. The contactor shall be familiar with the "Underground Facility Damage Prevention and safety Act", Florida Statute 556. The Contractor shall contact the Sunshine State One Call Center of Florida.

G. Do not store any environmentally hazardous materials such as solvent, greases, lubricants or any other type of chemical substances at the work sit. The Contractor is permitted to keep such materials at the site as are for immediate use only. Do not store any empty container at the site.

1.0.5 PIPE AND EXISTING UTILITIES

A. The underground utilities, structures and other facilities shown on the plans are located according to the best information available but may vary by several feet from both the position and elevation shown. The Contractor shall explore far enough in advance of his main trench to determine the exact location and condition of such utilities, structures or facilities so that, before the pipe is installed, the Engineer may change the line or grade of the pipe, should that become necessary to avoid a conflict.

B. In all cases where the main is deflected either horizontally or vertically, and the Engineer requires additional work and items such as paving and similar items for which a pay item was established in the quotation, then such additional work and items will be paid for at the prices bid. Wider trench widths may be paid with the approval of the Engineer.

C. The Contractor shall determine the locations of recent additions to the systems not shown on the plans. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from his activities. The location of all overhead utilities shall be verified, and the Engineer notified of any conflict which might occur. The Contractor shall be responsible for determining which poles will need shoring during excavation and shall provide such shoring and support as is required.

1.0.6 MATERIALS AND EQUIPMENT FURNISHED BY THE CITY

A. No material or equipment will be furnished by the City under this Contract. All material, labor and equipment necessary for completion of the work shall be furnished and installed by the Contractor, whether or not shown on the Plans or specifically mentioned in the Specifications.

1.0.7 WATER USED IN CONSTRUCTION

A. The City will furnish water at a charge for all construction activities unless otherwise specifically made an exception in the project specifications or specifically made an exception by the Engineer in writing.

B. Consumption for the following activities shall be determined by City personnel who shall be provided with a minimum of seventy-two (72) hour advance notification. Failure of the Contractor to provide advance notification and/or have City personnel on site to witness and verify consumption for the following activities could result in his being fined and/or a citation being issued against him in accordance with the Rules and Regulations of the City's Tampering Section.

1. Pigging:

2. Flushing, only if and when approved by the Engineer:

3. Chlorination, if applicable:

4. To fill mains being pressure tested, excluding make-up water during test: and

5. When and where directed or approved by the Engineer.

Water for construction activities listed above will be furnished from adjacent Cityowned water mains or the most convenient water source. In instances where no City-owned source of water is available, the Contractor shall make his own arrangements with the municipality or other controlling authority and include the cost of all water required during construction in his overall construction cost. No reimbursement will be made.

C. Water used in construction for purposes other than those listed above, including makeup water pumped into the pipe during hydrostatic testing, will be furnished by the City at a charge. This water will be supplied from the most convenient source through the existing piping. However, all water used must be metered through a City meter. The Contractor will be billed by the City based on water usage recorded by the floating meter.

D. When the project is occurring in the City of Opa-Locka, the Contractor shall present to the City, the Fire Department Permit during application with the New Business Office.

E. All piping, fittings, valves and equipment, including pumps and power, required for handling the water shall be furnished by the Contractor. Care shall be exercised in the use of the water and provision shall be made to protect the water supply for contamination and indiscriminate use by unauthorized persons. The Contractor shall use only potable water unless otherwise specifically called out elsewhere herein and then only in the case of sewage force mains, reclaimed water mains or raw water mains.

F. Under no circumstance shall the Contractor utilize a water source, including existing piping, until such source or piping has been approved for use by the City.

1.0.8 MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR

The general requirements specified herein shall apply to all items of materials and equipment in addition to the Specifications for individual items appearing in the following sections:

A. All materials and equipment furnished by the Contractor for use in the work shall be new and of recent domestic manufacture, and shall be the products of reliable manufacturers who, unless otherwise specified, have been regularly engaged in the manufacture of such material and equipment for at least five (5) years. All components shall, wherever possible, be standard stock articles of well-known domestic manufacturers. Where the plans and specifications designate the product of a particular manufacturer, the product specified has been found suitable for the intended use, but, unless otherwise provided, articles or products of similar characteristics may be offered for the approval of the Engineer. A minimum of six copies (more if so

required herein) of complete descriptive data shall be furnished regarding all articles furnished by the Contractor. The descriptive data shall consist of dimension drawings, catalog references and other information necessary to clearly identify each article. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense and shall be solely responsible for all cost and time required by any difference in construction methods, fabrication or assembly required and no additional time will be allowed. Any repermitting together with all costs and work associated therewith shall be performed by the Contractor and no additional compensation will be allowed.

B. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense. Said engineering design services shall be of an extent satisfactory to the Engineer whose word shall be final and shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.
C. All water system components shall be in full compliance with NSF/ANSI 61, "Drinking Water System Components - Health Effects," latest revision.

D. The Contractor shall also supply certification that all materials supplied that will come into contact with drinking water conform or will conform with NSF/ANSI 61.

E. The Contractor shall care for and protect against loss or damage all material and equipment to be incorporated in the construction, whether furnished by him/her or by the City, for the duration of the Contract, and shall repair or replace any lost or damaged items. The Contractor shall be relieved of such responsibility only upon final acceptance of all of the work by the Engineer.

F. No material shall be stored so that it is in direct contact with the ground. All metal shall be thoroughly cleaned before being placed in the work. Storage and protection measures shall be subject to approval of the Engineer whose decision shall be final. The Contractor shall immediately protect materials by different methods, materials or to a greater extent if so, directed by the Engineer in the field.

G. Unless otherwise specified or noted on the plans, all steel bolts, nuts, washers, eye bolts, tie rods and all other miscellaneous ferrous metal items shall be American made stainless steel.

H. The Contractor shall have available sufficient tools and equipment to properly perform his work in all areas of the system, including easements or other areas with limited or restricted access or clearances. The Contractor is specifically advised that work in easement may require specialized equipment to satisfactorily perform the work and the capability to accomplish these installations is a requirement of these specifications.

I. Any salvageable pipe, fitting, or other miscellaneous material or equipment, removed during construction and not reused in the work shall be cleaned, hauled to and stored by the Contractor at his expense, where directed by the Engineer, and shall remain the property of the City. All other material and equipment shall be disposed of by the Contractor at his own expense.

J. To ensure satisfactory and successful final painting of materials and equipment to be furnished, it is essential that the paints applied in the shop and in the field be mutually compatible. To this end, the Contractor shall require that the shop paints be applied to materials and equipment be compatible with the paints he proposes to use in the field or shall determine what shop paints have been used and select field paints compatible therewith, all as approved by the Engineer.

K. The Contractor shall furnish the City, with one set of any special tools required for servicing for each type of equipment actually furnished. These tools shall be delivered to the office of the City's Construction Manager, City of Opa-Locka Public Works. A letter of transmittal shall be provided, containing a list of all items being provided.

L. All other material required to complete this project shall be furnished and installed by the Contractor, whether or not shown on the plans or specifically mentioned in the specifications.

M. The Contractor shall procure extended manufacturer's warranties on equipment furnished by him. These warranties shall be kept in force and extended such that the City will be provided a manufacturer's warranty with at least one year to run beyond the date of final acceptance of the project. A copy of the warranty with these provisions clearly stated or with an attached letter of certification from the manufacturer to this effect shall be delivered with the equipment and no payment or partial payment for said equipment will be made until such warranty/certification is delivered to the Engineer.

1. The warranty shall specifically cover the case where the equipment warranted has been replaced by a newer model. In such instance the warranty shall either provide spare parts and service to repair or replace in its entirety the original model, or in lieu of this; provide a complete new model unit to replace the warranted and failing equipment. Should the failing equipment be replaced by a new model, the Contractor shall be responsible for making all necessary changes to adjacent and/or connected equipment at no extra cost to the City and to the satisfaction of the Engineer whose decision shall be final.

2. As a part of final inspection, the Contractor shall deliver to the City in a form satisfactory to the Engineer, either warranties or certifications of warranty

extensions showing the warranties to be in effect at least one year beyond the planned date of final acceptance.

3. All costs for procuring, maintaining and extending these warranties shall remain with the Contractor, even in cases where the contract construction time for completion has been extended. These costs shall be included in the Contractor's bid price and no further compensation will be allowed.

4. In instances, where the City puts an item of equipment into full productive service prior to final acceptance, the warranty shall still be extended to at least one year past final acceptance. However, the City will reimburse the Contractor for the prorated cost of the extended warranty from the time when the equipment was placed in full productive service to the date of final acceptance based upon the manufacturer's invoice to the Contractor for this cost. Only the warranty cost will be reimbursed, no overhead or other costs will be allowed.

N. Extended Warranties:

1. The Contractor shall procure extended manufacturer's warrantees on equipment furnished by him. These warrantees shall be kept in force and extended such that the City will be provided a manufacturer's warrantee with at least one (1) year to run beyond the date of final acceptance of the Project. A copy of the warrantee with these provisions clearly stated or with an attached letter of certification from the manufacturer to this effect shall be delivered with the equipment and no payment or partial payment for said equipment will be made until such warrantee/certification is delivered to the Engineer.

2. The warrantee shall specifically cover the case where the equipment warranted has been replaced by a newer model. In such instance the warrantee shall either provide spare parts and service to repair or replace in its entirety the original model, or in lieu of this; provide a complete new model unit to replace the warranted and failing equipment. Should the failing equipment be replaced by a new model, the Contractor shall be responsible for making all necessary changes to adjacent and/or connected equipment at no extra cost to the City and to the satisfaction of the Engineer whose decision shall be final.

3. As a part of final inspection, the Contractor shall deliver to the City in a form satisfactory to the Engineer, either warrantees or certifications of warrantee extensions showing the warrantees to be in effect at least one (1) year beyond the planned date of final acceptance.

4. All costs for procuring, maintaining and extending these warrantees shall remain with the Contractor, even in cases where the Contract construction time for completion has been extended. These costs shall be included in the Contractor's bid price and no further compensation will be allowed.

5. In instances where the City puts an item of equipment into full productive service prior to final acceptance, the warrantee shall still be extended to at least one (1) year past final acceptance. However, the City will reimburse the Contractor for the prorated cost of the extended warrantee from the time when the equipment was placed in full productive service to the date of final acceptance based upon the manufacturer's invoice to the Contractor for this cost. Only the warrantee cost will be reimbursed, no overhead or other costs will be allowed.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION NOT

USED

END OF SECTION

01120 SEQUENCE OF CONSTRUCTION

PART 1 – GENERAL 1.0.1

SCOPE OF WORK

A. The sequence of construction has been divided into phases and steps representing major work areas, all of this in order to facilitate to the Contractor the execution of the project and minimize conflicts with operations. The general sequence of construction shall be as described in this Section, but also the City reserves the right to make changes on it.

B. Coordinate sequence of construction with progress schedule to ensure timely performance of the work and project completion within the specified construction time.

C. Special Instructions: It is the intent of the City to construct this project with as little disturbance and annoyance to the pump station's neighbors as possible.

D. The Contractor's equipment must be in first class operating condition, including proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment. The Contractor shall provide a temporary electric service for his electric equipment as specified herein below, and shall pay all cost thereof, including all charges for electricity used during the entire course of the project until its acceptance by the City.

E. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City.

F. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

1.0.2 GENERAL

A. Following receipt of "Notice to Proceed" with the work, the Contractor shall notify the Engineer at least five (5) days before he is ready to start actual construction, to allow the City time to make arrangements for inspection of the work.

B. Contractor's PSM shall reestablish the design baseline, vertical control points and reference points, and establish proposed culvert location in accordance with Section 02314 "Excavation, Backfill and Fill for Structural Facility and Utility Systems", Construction Methods.

C. The Contractor's equipment must be in first class operating condition, including safety features, proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment.

D. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City.

E. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

F. All items shall be performed by the Contractor with special emphasis on the fact that numerous standard and miscellaneous construction phases are not mentioned specifically but shall be performed by the Contractor as required for a completed Project.

G. Water in the trench shall be kept below the level of the pipe to prevent the entry of debris and contaminants into the pipe.

   1. In instances where Section 02220 – Excavation, General, "Alternate Method of Construction" is approved by the Engineer and used for the Project: During construction, the Contractor shall install a temporary plug, or other means approved by the Engineer, on the open end of the pipe in order to prevent debris and trench water backwash from entering the pipe during trench excavation ahead of the installed pipe. The plug shall remain in place until the following length of pipe is ready to be installed. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

H. No separate payment shall be made for the cost of labor and materials required for the removal of nightcaps, plugs, bulkheads or external blocking and bracing of adjacent mains, for the supplying of water for cleaning and testing, nor for the

interconnecting work to adjacent mains unless listed separately in the Quotation, and the cost of this work shall be included in other applicable items of work.

I. The Contractor is advised that, if the work of this project includes work in the public right of way, that work may be shut down by the roadway governing authority during the period from the beginning of the Thanksgiving holiday through the end of the New Year holiday or some portion(s) of that period. Unless otherwise specifically called out herein, or granted by the Engineer in writing, no extension of Project time will be allowed due to such a shutdown. If any extension of time is allowed, it will be of a noncompensable nature. All costs of such a shutdown including any demobilization/remobilization costs shall be the sole responsibility of the Contractor and no extra compensation will be allowed. Upon ending of any such shutdown, the Contractor shall immediately resume construction operations unless otherwise ordered by the Engineer in writing.

J. The Contractor shall fully comply with any special working hours, and with all other requirements of the Permits, at no additional cost to the City. Working hours noted in permits or the specifications are subject to change. In the event that changed working hours effects the work of the Contractor, the Contractor's sole remedy shall be a noncompensable time extension. Said extension to be full compensation for all direct and indirect costs, including but not limited to loss of efficiency, loss of opportunity, increased bond or insurance premiums, or home office or extended overhead, incurred by the Contractor as a result of such change, and no additional compensation shall be considered. Night work may be required as a part of the construction.

K. New or altered potable water mains, including services, that will be under City control and have an inside diameter of three inches or larger shall be disinfected and bacteriologically evaluated in accordance with FAC Rule 62-555.340. Note that the above requirements are minimum, and the City may require more stringent procedures and routinely requires all services of whatever size be tested and disinfected along with the main. These more stringent or extensive requirements shall be performed by the Contractor and no extra compensation will be allowed.

L. All pipe and fittings installed under this project shall be color coded or marked as required by FAC Rule 62-555.320(21)(b)3, using blue as a predominant color to differentiate drinking water from reclaimed or other water and green as the predominant color for sanitary sewage facilities. Underground metal or concrete pipe shall have colored stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90-degree intervals around the pipe, and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint shall be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe;

for pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Striping shall be continuous and run the full length of the pipe. Aboveground pipe shall be painted shall be color coded or marked like underground pipe.

M. The Contractor shall take steps to provide accessibility for local traffic. The construction in this area shall proceed as quickly as possible and paving shall follow immediately to reduce inconvenience to residents in this area of the project.

N. The Contractor shall take pictures of the work site, in accordance with Section 01380 "Construction Photographs," prior to the start of any construction.

O. The Contractor is advised that, during the construction of the Project, the Construction Manager may require the Contractor to adjust the location of the proposed valves. This relocation(s) shall be performed at no additional cost to the City.

P. Locations of solid sleeves are for general information only. Exact location of solid sleeves shall be determined in the field by the Engineer. Prior to installation of solid sleeves, the pipe and fittings shall be hosed and kept clean, then swabbed with disinfectant as necessary for water main installation. Water in trench shall be kept below the pipe invert.

1.0.3 EXISTING WATER MAINS AND FORCE MAINS

A. The existing mains in the project area shall remain in service until the new mains are placed in service. Connections and disconnections together with cut, plug and abandonment work shall be coordinated through the City's Construction Manager. In all instances, the City's Construction Manager shall, beginning with the Preconstruction Meeting, coordinate with the Operations Division to pre-determine the notification lead times required for various operations.

1.0.4 SEQUENCE OF WORK

A. The general sequence of construction shall be as follows, but **a detailed sequence of construction shall be submitted by the Contractor and approved by the Engineer before any work is started**. The City reserves the right to make changes to the sequence as necessary to facilitate the work or to minimize conflict with operations and no extra compensation will be allowed.

B. CAPITALIZED ITEMS INDICATE WORK OR FUNCTIONS TO BE PERFORMED BY CITY FORCES. All other items shall be performed by the Contractor with special emphasis on the fact that numerous standard and miscellaneous construction phases

are not mentioned specifically but shall be performed by the Contractor as required for a complete Project.

Note: For simplicity, the Sequence of Construction below will not detail the following items. **These shall be the responsibility of the Contractor and no extra compensation will be allowed.**

1. Contractor's field verification of all information provided in the Plans and to determine the type, location, elevation, and extent of any utilities which may not have been shown on the Plans.

2. Notify "Sunshine State One-Call of Florida Inc., 811," forty-eight (48) hours prior to any excavation. Locate all utilities along the route of the Project.

3. Contractor's operations involving removal of the existing Culvert shall include:

   a. Excavate existing Culvert pipes and provide proper flow diversion between the Canal.

4. Installation of new Culvert system, including piping, mitered end section, backfilling, rip rap placement, and concrete pavement.

5. Construction of concrete curb and gutter, sidewalk, handicap access ramp, and guardrails.

6. Milling and resurfacing of pavement extents.

7. Contractor's PSM shall reestablish the design baseline, vertical control points and reference points, and establish proposed pipeline location in accordance with Section 02314 "Excavation, Backfill and Fill for Structural Facilities and Utility Systems - Construction Methods."

8. After items 6 and 7 are completed, the Contractor shall meet with the City Inspector at the Project site and perform a pre-construction walk-through along the entire route of the Project to identify possible problems or conflicts with the proposed pipeline location.

9. The general sequence of work shall be as follows:

1) Phase I – Mobilization

Step – 1 Initiate mobilization. The Contractor shall set up storage, staging and parking areas, temporary environmental controls and tree protection devices in the project site. Obtain permits, develop and submit construction schedule and start shop drawing submittal. Contractor shall allow access to the other facilities within the project area, including adjacent businesses and homes at all times during construction.

Step – 2 Call for locates (Sunshine 811) and document all location marks in the field.

Step – 3 Contractor shall include the necessary provisions to safeguard the existing utilities noted within the project area. Furthermore, the Contractor shall be advised that the utilities shown on plans are based on best available information and shall take all necessary precautions to confirm, identify, preserve, and maintain the integrity while performing construction.

Step – 4 Contractor shall **immediately** open a dialog with all existing utilities in the project area. Contractor shall notify Engineer of any utility relocation requirements and costs. Utility relocations shall be reimbursed under a dedicated allowance account. Failure to properly coordinate any required utility relocations may result in delays for which the Contractor may be liable for.

Step – 5 Verify locations, elevations, dimensions, manufacturer of pipes, equipment, etc., before ordering materials to complete the work in accordance with the Contract Documents, Shop Drawings and field conditions.

Step – 6 Upon approval of shop drawings, order long lead items so that materials may be delivered in a timely fashion without delays to construction.

2) Phase II – Demolition of Existing Culvert and Appurtenances NOTE: Refer to Drawings, Sheets C-01 and C-02

Step – 1 Installation of all Erosion Control measures within the Canal.

Step – 2 Removal of existing concrete pavement, concrete headwall, and culvert piping.

Step – 3 Prepare temporary bypass system, if necessary, to divert Canal flows from East to West and vice versa. After successful flow diversion and authorization by the City; the Contractor shall proceed with the installation of the removal of the existing Culvert piping.

3) Phase III – New Culvert Installation

Step – 1 Prepare bedding material to lay stone base for new piping.

NOTE: The Contractor shall provide appropriate shoring to conduct the stone bedding and 66-inch SRASP pipe installation in dry conditions.

Step – 2 Secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations.

Step – 3 The Contractor shall secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations and up to elevation established on plans. Embankment slopes shall be established.

Step – 4 Install concrete headwall at pipe ends.

Step – 5 Install geotextile matting and, sand-cement and Rubble Stone embankment stabilization.

Step – 6 Lay new concrete curb and gutter and sidewalk.

Step – 7 Install new guardrail.

Step – 8 Install new concrete shoulder barrier

4) Phase IV – Final Sitework and Project Closeout

Step – 1 Form and pour the 8" thick concrete pavement surface above Culvert piping.

Step – 2 Lay new concrete curb and gutter and sidewalk.

Step – 3 Mill and resurface top 1" surface course of roadway.

Step – 4 Paint roadway pavement markings and remove temporary construction signage.

Step – 5 Demobilization and related closeout activities shall be in accordance with section 01700 "Project Closeout".

Step – 6 Complete all remaining miscellaneous and appurtenant work, including restoration of damaged survey control points, landscape restoration and final inspection and cleanup.

C. The Contractor's equipment must be in first class operating condition, including proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment. The Contractor shall provide a temporary electric service for his electric equipment as specified herein below, and shall pay all cost thereof, including all charges for electricity used during the entire course of the project until its acceptance by the City. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01200 PROJECT MEETINGS

PART 1 – GENERAL 1.0.1.

PROJECT SCHEDULES

A. General: Develop and submit for approval by the City a construction progress schedule and phasing plan demonstrating complete fulfillment of all Contract requirements including all activities of Subcontractors, equipment vendors and suppliers. Unless otherwise directed by the Engineer, the construction progress schedule shall be computer developed and maintained using Microsoft Project software as manufactured by Microsoft Corporation, Primavera, or equal. The Contractor shall prepare a network plan utilizing CPM (Critical Path Method). The City reserves the right to request progress schedule on magnetic media.

B. Submittal: The progress schedule shall be plotted on 11-inch by 17-inch paper and shall be reviewed and updated monthly, depicting progress through the last day of the current month and scheduled progress through completion. Six up to date copies of the schedule shall be submitted along with the application for monthly progress payments for the same period.

1. Immediately after award of contract, submit for review the progress schedule describing the activities to be accomplished and their dependency relationships, showing starting and completion dates for each activity in terms of the number of days after receipt of Notice to Proceed. All completion dates shown shall be within the period specified for contract completion.

2. After receipt and initial review, the Engineer will meet with the Contractor for joint review, correction or adjustment of the proposed plan and schedule. Within five (5) calendar days after the joint review, the Contractor shall revise the schedule in accordance with agreements reached during the joint review and shall submit two copies of the revised schedule. After the Contractor has received both the Notice to Proceed and the approved copy of the schedule, he shall immediately add calendar dates in lieu of the number of days from the date of Notice to Proceed and shall furnish two copies of the revised schedule to the Engineer.

C. Schedule Requirements:

1. Show the sequence and interdependence of activities required for complete performance. In preparing the schedule, break up the work into activities of a duration of no longer than fifteen working days each, except as to non-construction activities (such as procurement of materials, delivery of equipment and concrete curing) and any other activities for which the Engineer may approve the showing of longer duration. The schedule shall show the activities for actual construction work for each trade category of the project. The Contractor is to include a schedule of submittals of shop drawings, equipment schedules, coordination drawings, templates, fabrication, delivery and the like, and review and approval of shop drawings. Activities related to a specific physical area of the project shall be grouped on the schedule for ease of understanding and simplification. Activity

duration (i.e. the single best estimate, considering the scope of the activity, and the resources planned for the activity) shall be shown on each activity on the diagram. To the extent that the schedule or any revised schedule shows anything not jointly agreed upon or fails to show anything jointly agreed upon, it shall not be deemed to have been approved by the Engineer. Failure to include any element of work required for the performance of this Contract shall not excuse the Contractor from completing all work required within any applicable completion date, notwithstanding the City's approval of the schedule.

2. Include a cost estimate for each activity which cumulatively equals the total Contract cost. Estimated overhead and profit shall be prorated throughout all activities. The partial payments as defined under the General Conditions will be based on these approved activity costs.

3. With each request for a partial payment, submit a copy of the approved schedule marked to show the activities completed and partially completed, for which payment is requested.

4. The Contractor is advised that, if the work of this project includes work in the public right of way, that work may be shut down by the roadway governing authority during the period from the beginning of the Thanksgiving holiday through the end of the New Year holiday or some portion(s) of that period. Unless otherwise specifically called out herein, or granted by the Engineer In writing, no extension of Project will be allowed due to such a shutdown. If any extension of time is allowed, it will be a non-compensable nature. All costs of such a shutdown including any demobilization/re-mobilization costs shall be the sole responsibility of the Contractor and no extra compensation will be allowed. Upon ending of any such shutdown, the Contractor shall immediately resume construction operations unless otherwise ordered by the Engineer in writing.

5. The Contractor shall fully comply with any special working hours, and with all other requirements of the Permits, at no additional cost to the City. Working hours noted in permits or the specifications are subject to change. In the event that changed working hours affects the work of the Contractor, the Contractor's sole remedy shall be a non-compensable time extension. Said extension to be full compensation for all direct and indirect costs, including but not limited to loss of efficiency, loss of opportunity, increased bond or insurance premiums, or home office or extended overhead, incurred by the Contractor as a result of such change, and no additional compensation shall be considered. Night work may be required as a part of the construction.

1.0.2. PROGRESS MEETINGS

A. General progress meetings will be held once each week at which every entity then involved in the planning, coordination and performance of work shall be discussed. The progress of each element of current work shall be discussed as to whether it is ahead of schedule, on time or behind time in relation to the updated progress schedule. For each meeting, the Contractor shall prepare a detailed three (3) week "look ahead" schedule in addition to, showing the progress schedule of the previous week. Methods to expedite behind-time work shall be determined, and commitments secured for bringing back to the scheduled date for the entities involved. Everything of significance which could affect the progress of the work, including schedule revisions, shall be discussed to ensure that current and subsequent work will be completed within the Contract time. Within three days after each meeting, copies of the minutes of the meeting, including a brief summary of progress of the work since the previous meeting, shall be distributed to each present or who should have been present. Whenever revisions to the progress schedule have been made or recognized at the progress meeting, a copy of the revised schedule shall accompany the minutes distributed.

B. Each computer-generated construction progress schedule and report shall include the following minimum items:

1. Activity Numbers.
2. Duration Estimate.
3. Activity Description.
4. Early Start Date (Calendar Dated).
5. Early Finish Date (Calendar Dated).
6. Latest Allowable Start Date (Calendar Dated).
7. Latest Allowable Finish Date (Calendar Dated).
8. Status (whether critical).
9. Estimated Cost of The Activity.
10. Total Float and Free Float.

C. In addition, each construction progress schedule, network analysis and report shall be prefaced with the following summary data:

1. Contract Name and Number.

2. Contractor's Name.

3. Contract Duration.

4. Contract Schedule.

5. The Effective or Starting Date of The Schedule (the date indicated in the Noticeto-Proceed).

D. The workday to calendar date correlation shall be based on an 8-hour day and 40hour week with adequate allowance for holidays, adverse weather and all other special requirements of the work. Normal work hours are Monday thru Friday, 7:30 am to 4:30 pm.

E. If the Contractor desires to make changes in the method of operating which affects the construction progress schedule and related items, he/she shall notify the Engineer in writing stating what changes are proposed and the reason for the change. If the Engineer accepts these changes, in writing, the Contractor shall revise and submit, without additional cost to the City, all of the affected portions of the construction progress schedule, and associated reports. The construction progress schedule and related items shall be adjusted by the Contractor only after prior acceptance, in writing by the Engineer. Adjustments may consist of changing portions of the activity sequence, activity durations, division of activities, or other adjustments as may be required. The addition of extraneous, non-work activities and activities which add restraints to the construction progress schedule shall not be accepted.

F. Except where earlier completions are specified, schedule dates which show completion of all work prior to the contract completion date shall, in no event, be the basis for claim for delay against the City by the Contractor.

G. Construction progress schedules and related items which contain activities showing negative float or which extend beyond the contract completion date will not be accepted by the Engineer. Whenever it becomes apparent from the current construction progress schedule and associated reports that delays to the critical path have resulted and the contract completion date will not be met, or when so directed by the Engineer, the Contractor shall take some or all of the following actions at no additional cost to the City. They shall submit to the Engineer for approval, a written statement of the steps they intend to take to remove or arrest the delay to the critical path in the current construction progress schedule.

1. Increase construction manpower in such quantities and crafts as will substantially eliminate the backlog of work.

2. Increase the number of working hours per shift, shifts per day, working days per week, the amount of construction equipment, or any combination of the foregoing, sufficiently to substantially eliminate the backlog of work.

3. Reschedule activities to achieve maximum practical concurrence of accomplishment of activities and comply with the revised schedule.

H. If when so requested by the Engineer, the Contractor should fail to submit a written statement of the steps they intend to take or should fail to take such steps as reviewed and accepted in writing by the Engineer, the Engineer may direct the Contractor to increase the level of effort in manpower (trades), equipment and work schedule (overtime, weekend and holiday work, etc.) to be employed by the Contractor in order to remove or arrest the delay to the critical path in the current construction progress schedule, and the Contractor shall promptly provide such level of effort at no additional cost to the City.

I. If the completion of any activity, whether or not critical, falls more than 100 percent behind its previously scheduled and accepted duration, the Contractor shall submit for approval a schedule adjustment showing each such activity divided into two activities reflecting completed versus uncompleted work.

J. Shop drawings which are not approved on the first submittal or within the time scheduled, and equipment which does not pass the specified tests and certifications shall be immediately rescheduled.

K. The contract time will be adjusted only in accordance with the General Requirement and other portions of the Contract Documents as may be applicable. If the Engineer finds that the Contractor is entitled to any extension of the contract completion date, the Engineer's determination as to the total number of days extension shall be based upon the current construction progress schedule and on all data relevant to the extension. Such data shall be included in the next updating of the schedule and related items. Actual delays in activities which, according to the construction progress schedule, do not affect any contract completion date will not be the basis for a change therein.

L. From time to time it may be necessary for the contract schedule of completion time to be adjusted by the City in accordance with the General Requirements and other portions of the Contract Documents as may be applicable. Under such conditions, the Engineer will direct the Contractor to reschedule the work or contract completion time

to reflect the changed conditions, and the Contractor shall revise the construction progress schedule and related items accordingly, at no additional cost to the City.

M. Available float time may be used by the City through the City's Engineer.

N. The City controls the float time and, therefore, without obligation to extend either the overall completion date or any intermediate completion dates the City may initiate changes that absorb float time only. City initiated changes that affect the critical path on the network diagram shall be the sole grounds for extending the completion dates. Contractor-initiated changes that encroach on the float time may be accomplished only with the City's concurrence. Such changes, however, shall give way to City-initiated changes competing for the same float time.

O. To the extent that the construction project schedule, or associated report or any revision thereof shows anything not jointly agreed upon or fails to shown anything jointly agreed upon, it shall not be deemed to have been accepted by the Engineer. Failure to include on a schedule any element of work required for the performance of this Contract shall not excuse the Contractor from completing all work required within any applicable completion date, notwithstanding the review of the schedule by the Engineer

P. Review and acceptance of the construction progress schedule, and related reports, by the Engineer is advisory only and shall not relieve the Contractor of the responsibility for accomplishing the work within the contract completion date. Omissions and errors in the construction progress schedule, and related reports shall not excuse performance less than that required by the Contract and in no way make the Engineer an insurer of the Contractor's success or liable for time or cost overruns flowing from any shortcomings in the construction progress schedule, and related reports.

Q. The Contractor shall present and discuss the proposed schedule at the preconstruction conference.

R. The construction progress schedule shall be based upon the precedence diagramming method of scheduling and shall be prepared in the form of a horizontal bar chart showing in detail the proposed sequence of the work and identifying all construction activities included but not limited to yard piping, all structures and treatment units and all related work specified herein to be performed under the Contract. The schedule shall be time scaled, identifying the first day of each week, with the estimated date of starting and completion of each stage of the work in order to complete the project within the contract time. The project critical path shall be clearly identified.

1.0.3. DAILY REPORTS

A. Prepare and submit to the Engineer at regular intervals not exceeding weekly intervals, a daily report recording information concerning events at the site. The daily reports shall contain the following and any other significant information:

1. General weather conditions, rain, high/low temperatures.
2. List of Subcontractors on site.
3. List of separate Contractors at the site, if any.
4. Meetings and significant decisions.
5. Stoppages, delays, shortages, losses.
6. Emergency procedures, field orders.
7. Orders/requests by governing authorities.
8. Other events or activities.
9. Partial completions.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION NOT

USED

END OF SECTION

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Submittals covered by these requirements include manufacturers' information, shop drawings, test procedures, test results, samples, requests for substitutions, and miscellaneous work-related submittals. Submittals shall also include, but not be limited to, all mechanical, materials, reinforcing steel, fabricated items, and piping and conduit details. The Contractor shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules, and manufacturer's installation and other instructions as specifically required in the contract documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.

B. The Contractor shall submit copies of all permit applications, permit submittals, permit comments and permit approvals.

C. Within 10 calendar days after Notice to Proceed, Contractor shall submit a complete list of all anticipated submittals including shop drawings, submittals, and product data with an anticipated delivery date to the Engineer and review and approval times. This shall be reviewed during the Project Kickoff Meeting and shall be continuously updated and reviewed during Project Progress Meetings.

1.0.2. CONTRACTOR'S RESPONSIBILITY

A. The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the specified requirements. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and notify the Engineer in each case where his submittal may affect the work of another Contractor or the Owner. The Contractor shall coordinate submittals among its Subcontractors and suppliers including those submittals complying with unit responsibility requirements.

B. Record Drawings: Refer to Section 01720 "Project Record Drawings".

C. As-Built Record Drawings: Refer to Section 01725 "As-Built Record Drawings".

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION NOT

USED

END OF SECTION

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Before proceeding with the erection of the construction plan, including the setting or placing thereof, and the erection of other temporary structures, the Contractor shall furnish the Engineer with such information and plans as the City may require.

B. Shop Drawings (including Pre-Approved Product List submittals) shall be submitted prior to any project construction activity. In a timely fashion, well before the contemplated ordering for fabrication of special order or long-lead items or construction use of any standard element of the work, the Contractor shall furnish Shop Drawings for the review and approval of the City.

C. It is the Contractor's sole responsibility, upon the first occasion of submittal of a particular element of the work, to submit Shop Drawings of an element which match and fulfill the requirements and intent of the plans and specifications. Any delays or costs caused, either directly or indirectly, by non-timely submissions; submission of items differing significantly from the intent of the plans and/or specifications; repeated submission of, or argument over, rejected elements or changes required for acceptance; arguments with the criteria or requirements of the plans or specifications; or any other such similar activities shall be at the expense of the Contractor.

D. It is the intent of the Contract Documents that the Contractor shall, in the first instance, submit Shop Drawings of elements which meet or exceed the requirements of the Contract Documents and fit with the other elements of the work and the existing conditions. Delays or the inability to obtain shop drawing approval may subject the Contractor to costs for liquidated or actual damages as specified in the Contract.

1.0.2. DESCRIPTION OF WORK

A. It is the intent of the Contract Documents that the Contractor shall, in the first instance, submit Shop Drawings of elements which meet or exceed the requirements of the Contract Documents and fit with the other elements of the work and the existing conditions. Delays or the inability to obtain shop drawing approval may subject the Contractor to costs for liquidated or actual damages as specified in the Contract.

B. After award of the project, the Contractor may begin providing submittals for approval. Submit to the Engineer a complete list of preliminary data on items for which Shop

Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way expressed or implied relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the specifications. This procedure is required in order to expedite final review of Shop Drawings.

C. Maintain an accurate updated Shop Drawing submittal log which shall include the following items:

1. Submittal Description and Number Assigned.
2. Specification Section.
3. Plans Sheet Number.
4. Date to Engineer.
5. Date Returned to Contractor (from Engineer).
6. Status of Submittal (Approved, Approved as Noted, Rejected/Resubmit).
7. Date of Resubmittal and Return (as Applicable).
8. Date Material Release (for Fabrication).
9. Projected Date of Fabrication.
10. Projected Date of Delivery to site.
11. Status of O & M Manuals Submittal.

1.0.3. CONTRACTOR'S RESPONSIBILITY

A. Furnish the Engineer with a schedule of Shop Drawings submittals, fixing the respective dates for the submission of Shop Drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.

B. Submit to the Engineer all plans and schedules sufficiently in advance of construction requirements to provide maximum time for checking and appropriate action from the time the Engineer receive them.

C. It is the duty of the Contractor to check and approve all plans, data and samples prepared by or for him/her before submitting them to the Engineer for review. Each and every copy of the plans and data shall bear Contractor's stamp showing that they have been checked and approved. Shop Drawings submitted to the Engineer without the Contractor's stamp and approval shall be returned to the Contractor for conformance with this requirement before Engineer's review. ***Shop Drawings shall indicate any deviations in the submittal from requirements of the Project Documents and the Contractor shall state the reason why a deviation is required.***

D. All submittals shall be accompanied by a submittal registry and transmittal letter containing the following information:

1. Date.

2. Project Title and Number.

3. Contractor's name and address.

4. The number of each Shop Drawing, Data, and Sample submitted.

5. Notification of Deviations from Project Documents.

6. Submittal Log Number conforming to and referring to Specification Section Number.

7. Contractor signature or of its authorized representative.

E. Submit seven copies of Shop Drawings and of descriptive or product data submittals necessary to complement Shop Drawing. The Engineer will retain five sets.

F. After receiving approval by the Engineer, the Contractor shall be responsible for submitting the Shop Drawings to the City. Shop Drawings of all premanufactured items and all other Shop Drawings are required to obtain approval prior to manufacturing or installing the submitted items. The Contractor shall also be responsible for contesting any interpretations by the City that considers non-acceptable. The Contractor shall include in the bid prices, all costs for permits, fees and expenses associated with the submittals, including resubmittals (if any) of Shop Drawings to the City.

G. Do not begin any of the work covered by a drawing, data, or a sample returned as "Rejected/Resubmit" until a revision or correction thereof has been reviewed and returned to the Contractor, by the Engineer, with approval or approval "As Noted". Be responsible for and bear all costs of damages which may result from the ordering of any material or from proceeding with any part of work prior to receiving Engineer's approval or approval "As Noted" of the necessary Shop Drawings.

H. Be fully responsible for observing the need for and for making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the materials/equipment the Contractor proposes to supply, both as they pertain to the Contractor's own work, work of others, or of other Divisions herein or Trades and clearly show such changes on the Shop Drawings.

I. When substitutions in materials or equipment are allowed, the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense.

J. When substitutions in materials or equipment are allowed, the Contractor shall be solely responsible for all costs and time required by any differences in construction methods, fabrication or assembly required and no additional time will be allowed.

K. Determine and verify:

1. Field measurements.

2. Field construction criteria.

3. Catalog numbers and similar data.

4. Conformance with specifications.

5. That installation and maintenance clearances are sufficient particularly when equipment or arrangement changes have been made.

1.0.4. ENGINEER'S REVIEW OF SHOP DRAWINGS

A. Engineer's review of plans, data and samples, submitted by the Contractor will cover only general conformity to the drawing and specifications. The Engineer's review will not constitute an approval of dimensions, quantities, and details of the material,

equipment, device, or item shown. The review of plans and schedules will be general, and shall not be construed:

1. As permitting any departure from the Contract requirements.

2. As relieving the Contractor of responsibility for any errors, including detail, dimensions, and materials.

3. As approving departures from details furnished by the Engineer, except as otherwise provided herein.

B. Variations:

1. If the plans or schedules, as submitted, describe variations per paragraph 1.03 C, and show a departure from the Contract requirements which Engineer finds to be in the interest of the City and to be so minor as not to involve a change in Contract price or time for performance, the Engineer may return the reviewed plans without noting an exception.

2. If the plans or schedules, as submitted, describe variations and show a departure from the Contract requirements which the Engineer finds to be minor enough to be corrected by redlining the submittal, the Engineer will mark and return the submittal marked "Approved as Noted." The redlined corrections shall be as binding on the Contractor as would be a resubmission embodying the same corrections.

C. When reviewed by the Engineer, each of the Shop Drawings shall be stamped and dated to indicate it had been reviewed. Shop Drawings stamped "Revise and Resubmit" and with required corrections shown will be returned to the Contractor for correction and resubmittal.

D. If the Contractor considers any correction indicated on the Shop Drawings to constitute a change to the project plans or specifications, the Contractor shall give written notice thereof to the Engineer who will render a decision which shall be final. After the decision has been made, the Contractor shall without delay, provide the corrections to the plans.

E. When the Shop Drawings have been approved by the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

F. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor for resubmittal.

1.0.5. SHOP DRAWINGS

A. Shop drawings shall be of such character that they may be used as fabrication drawings. Prior to submission, the Contractor shall thoroughly check such drawings, satisfying himself that they meet the requirements of the Plans and Specifications and that they are coordinated with the arrangements set forth on other shop drawings, and shall place on them the Project Number, the date and his signature and stamp of approval. Where items for which shop drawings are submitted are to meet special conditions listed in the detailed Specifications, the conditions shall be so noted on the drawing. Where there is a deviation from the Specifications, the Contractor shall note it and state the reason why a deviation is required. Two copies will be returned to the Contractor with the Engineer's mark of approval thereon, or will be marked to indicate changes necessary to effect compliance with the Specifications and the remaining copies will be retained by the City. When shop drawings are approved by the Engineer, they shall be as binding as any of the Contract Documents. Any errors or omissions on the shop drawings shall not relieve the Contractor of his responsibility.
   He shall correct such errors, or omissions, including any necessary additions or alterations to construction, at his expense upon notification by the Engineer.

B. Shop drawings submitted without the required approval as specified above shall be returned without review and no extension of time will be granted for any delays caused by such improper submission.

C. The approval of shop drawings and data will be general, and shall mean that upon examination of the shop drawings, no variations from the Contract requirements have been discovered, and approval will not relieve the Contractor of his responsibilities as defined under the Contract.

D. When used in the Project Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for materials and equipment which become an integral part of the project. These Shop Drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance/test data shall be considered only as supportive to required Shop Drawings as defined above.

E. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked to identify pertinent materials, product or models. Information which is not applicable to the work shall be deleted by striking or cross hatching.

F. If plans show variations from Contract requirements because of standard shop practice or for other reasons, describe such variations in the letter of transmittal. If no explanation of these variations is provided, the Contractor shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such plans have been reviewed and approved.

G. For all mechanical and electrical equipment furnished, provide a list including the equipment name, address of and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.

H. All manufacturers or equipment suppliers who propose to furnish equipment or products shall submit an installation list to the Engineer along with the required Shop Drawings. The installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least five years, unless otherwise specified. Manufacturers and/or equipment which fails to meet the specified experience period will be considered if the manufacturer or supplier provides a bond or cash deposit which will guarantee replacement of the equipment or process in the event of failure or unsatisfactory service.

I. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.

1.0.6. REQUIRED INFORMATION

A. Submit, as applicable, the following for all prefabricated or manufactured structural, mechanical, electrical, plumbing, process system, and equipment work:

1. Shop Drawings or equipment drawings, including dimensions, size and location of connections to other work, and weight of equipment.

2. Catalog information and cuts.

3. Installation or placing plans for equipment, drives, and bases.

4. Supporting calculations, signed and sealed by a Florida Registered Engineer when required, for equipment and associated supports, or hangers required or specified to be designed by equipment manufacturers.

5. Signed and sealed calculations and plans by in-house Florida Registered Professional Engineer for structural systems, indicating compliance to the structural design criteria specified in the plans.

6. Complete manufacturer's specifications, including materials description and paint system.

7. Performance data and pump curves.

8. Suggested spare parts with current price information.

9. List of special tools required for testing, checking, parts replacement, and maintenance. (Special tools are those which have been specially designed or adapted for use on parts of the equipment, and are not customarily and routinely carried by maintenance mechanics)

10. List of special tools furnished with the equipment

11. List of materials and supplies required for the equipment prior to, and during startup

12. List of materials or supplies furnished with the equipment

13. Special handling instructions

14. Requirements for storage and protection prior to installation

15. Requirements for routine maintenance required prior to equipment startup

16. List of all requested exceptions to the Project Documents

1.0.7. SUBMITTAL REQUIRED FOR FOREIGN MANUFACTURED ITEMS

A. In addition to the submittal requirements stated above, suppliers of foreign manufactured items shall submit the names and addresses of companies within the United States that maintain technical service representatives and a complete inventory of spare parts and accessories for each foreign-made item proposed for incorporation into the work. Failure to prove these capabilities shall be cause for rejection of the foreign manufactured items.

B. Foreign manufactured equipment and materials shall in all cases be clearly and permanently marked with the manufacturer's name and country of origin of the item. The name of the U.S. importing/supplying firm is not acceptable. Shop Drawing submittals of foreign-made items shall be accompanied by written information to include name and location (i.e. country, City, and street address) of the manufacturer. This requirement shall also apply to the foreign made elements of items assembled in this country from parts wholly or partially manufactured overseas.

1. The words, "Permanently Marked" as used in this paragraph shall mean; die stamped, cast-in, welded, or otherwise marked such that the removal of the marking by any mechanical or chemical means will result in obvious permanent damage to the surface marked. These markings shall be on surfaces which are not hidden by assembly.

C. Where specified elsewhere herein or at the sole discretion of the Engineer, whose word shall be final, supply verification of quality, suitability or other aspects, as directed by the Engineer, from a Professional Engineer licensed to practice in the State of Florida or the state where the supplying U.S. firm is located. The verification shall be signed, sealed, and dated. All costs for this verification shall be at the sole expense of the Contractor and no extra compensation will be allowed. Verification by foreignbased engineers, firms, manufacturers, etc. will not be acceptable.

1.0.8. SAMPLES

A. Furnish for the approval of the Engineer, samples required by the Project Documents or required by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until approved by the Engineer.

B. Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices.

2. Full range of color, texture and pattern.

3. A minimum of two samples of each Item shall be submitted.

C. Each sample shall have a label indicating:

1. Name of Project.

2. Material or Equipment Represented.

3. Name of Producer and Brand (if any) Location in Project.

D. Prepare a transmittal letter in triplicate for each shipment of samples containing the information specified herein in Paragraph 1.05 A. Enclose a copy of this letter with the

shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use specified and shall not be construed to change or modify any Contract requirements.

E. Approved samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the approved samples.

1.0.9. SUSTITUTION

A. Changes in products, materials, equipment, and methods of construction required by the Contract Documents, which are proposed by the Contractor after award of the Contract, are considered to be requests for substitutions. Where the plans and/or specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use. Articles or products of similar characteristics may be offered for the approval of the Engineer, whose decision shall be final. Copies of complete descriptive data shall be furnished regarding all materials furnished by the Contractor, consisting of Dimension drawings, catalog references, product data, cost, and other information necessary to clearly identify and evaluate each article.

B. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent, connected, or other structures and equipment at his expense. the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense. Said engineering design services shall be of an extent satisfactory to the Engineer whose word shall be final and shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.

C. Where there is a deviation from the Specifications, the Contractor shall note it and state the reasons why a deviation is required.

D. Where engineer-recommended changes, substitutions or appurtenant work require engineering design, the Contractor shall have such design services performed. Those engineering design services shall be of an extent satisfactory to the Engineer, whose decision shall be final.

E. The approval of Pre-Approved product sheets, shop drawings and data will be general and shall mean that upon examination of the drawings, no variations from the approved project drawings and project requirements have been discovered, and approval will not relieve the Contractor of his responsibilities as defined above. The

City's review will not constitute an approval of dimensions, quantities and details of the material, equipment or item shown.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01380 CONSTRUCTION PHOTOGRAPHS AND VIDEO PHOTOGRAPHY

PART 1 – GENERAL 1.0.1

DESCRIPTION OF WORK

A. This section specifies the taking and submission of construction photographs and audio-video photography.

B. Prior to the delivery of any equipment, materials or supplies to the site of any work, or to the beginning of any of the construction work, the Contractor shall provide preconstruction photography as specified herein for the purpose of establishing the surface conditions existing in all of the areas to be affected by the construction of the Project.

C. Pre-Construction Photographs: The Contractor shall video/photograph the entire project site during normal working hours including all concrete and asphalt pavements, curb and gutter, fencing, landscaping to remain, structures to be demolished, and existing structures that are to be modified. All videos and photographs shall be date and time stamped and a digital copy submitted on a flash drive/memory stick or media acceptable to the City prior to beginning construction activities. The video/photographs shall clearly identify existing site and structural conditions.

D. Ground photography shall consist of photographs and color video taping of surface features taken along the entire length of the Project and including all work, intersecting roadways and properties that will be impacted by the water service conversions.

E. The purpose of the color audio-video taping of the project is to provide the necessary information for restoration of surface features after completion of the Project. The Contractor shall be responsible for repairing any damage or defect not documented as existing prior to construction.

1.0.2 QUALITY ASSURANCE

A. Photographs shall be clean, sharp and clearly show details. Out-of-focus photographs will not be acceptable.

B. Digital photographs which are poorly lit or lack definition will not be acceptable

1.0.3 SUBMITTALS

A. Submit one (1) final digital file of each construction photograph and one (1) flash drive/memory stick or acceptable media with the video as follows:

1. Within fourteen (14) days of receiving Notice to Proceed

2. Number photographs in sequence beginning with the numeral one

PART 2 – PRODUCTS 2.0.1

SIZE AND QUALITY

A. Digital pictures and videos shall be compatible with City's software, color, 3½-inches by 5-inches.

B. Digital pictures and videos shall be compatible with City's software.

2.0.2 IDENTIFICATION

A. Each photograph shall be stamped with the following information stamped or typed on the back of the print:

CITY OF OPA-LOCKA WORKS DEPARTMENT
Contract No. _____
1-91

CONTRACTOR: _____

Photograph No. _____ Date: _____ Time: _____

Description: _____

_____

_____

2.0.3 QUANTITY

A. A minimum of twelve (12) photographs shall be taken prior to construction and twelve more each month until completion of the Work.

B. In the instance of a pipeline installation, take a minimum of one photograph each 200 feet or fraction thereof along the entire route of the main initially. During construction a minimum of one photograph every two hundred feet or fraction thereof of that portion of the main constructed during the month until completion.

C. The number of photographs required shall be at the sole discretion of the Engineer whose decision shall be final.

D. An increase in the number of photographs above the minimums shall not be cause for an increase in cost and no extra compensation will be allowed.

2.0.4 VIDEO PHOTOGRAPHY

A. Color audio-video shall be submitted on a flash drive/memory stick or acceptable media.

PART 3 – EXECUTION

3.0.1 INITIAL AND CONSTRUCTION PHOTOGRAPHY

A. Take pre-construction photographs of the entire site or route of the main after receiving the Notice to Proceed and prior to disturbing the site in any manner. Coordinate with the Engineer as to the vantage points and number of photographs required in Paragraph 2.0.3.

B. Photography During Construction: Coordinate with the Engineer as to the actual number and location of views to be photographed and the day and time of photographing.

C. Photographic equipment utilized shall be of sufficient quality to produce pictures capable of being enlarged without loss of definition or sharpness.

3.0.2 PHOTOGRAPHY DURING CONSTRUCTION

a. Coordinate with the Engineer as to the actual number and location of views to be photographed and the day and time of photographing.

3.0.3 VIDEO PHOTOGRAPHY

A. Coverage of Taping: Such coverage shall include, but not be limited to, all existing driveways, sidewalks, curbs, streets, signs, landscaping, trees, catch basins, fences, visible utilities and all buildings located within the work zone of the Project. Of particular concern are any existing faults, fractures, defects or other features. Audio description shall be made simultaneously with and support the video coverage.

B. Streets: shall be recorded by audio-video tape for the full width of the right-of-way, except where specifically noted otherwise by the Engineer.

C. Front, Side and Rear Yard Areas: shall be recorded by audio-video tape of properties impacted by the water service conversions.

3.0.4 LOCATION INFORMATION

A. All flash drives/memory sticks or other acceptable media shall be properly identified by number, location and project name in a manner acceptable to the Engineer.

B. A record of the contents of each flash drive/memory stick or acceptable media shall be supplied on a run sheet identifying each segment in the tape by location, i.e., street viewing side, traveling direction, engineering stationing, and all referenced by tape counter numbers.

C. All video recordings shall begin with the date and time of recording, the project name, the sheet numbers of engineering stationing as shown on the plans, the name of the street, area or building being taped, the direction of travel and the viewing side. Houses and buildings shall be identified visually by house or building address, when possible, in such manner that the progress of the taping and the proposed system may be located by reference to the houses and buildings.

3.0.5 SITE RECORDING CONDITIONS

A. All audio-video taping shall be done during times of good visibility. No outside taping shall be done during periods of visible precipitation or when the ground area is covered with leaves or debris, unless otherwise authorized by the Engineer.

B. In order to produce the proper detail and perspective, adequate auxiliary lighting will be required to fill in shadow areas caused by trees, utility poles, road signs and other such objects, as well as other conditions requiring artificial illumination.

C. The average rate of speed in the general direction of travel of the conveyance used during taping shall not exceed 60 feet per minute. Planning rates and zoom-out rates shall be controlled sufficiently so that playback will produce adequate clarity of the object being viewed.

END OF SECTION

01400 QUALITY CONTROL

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The intent of this section is to emphasize the City interest in quality products being designed and installed within the time and cost considerations of the project. The Contractor shall have primary responsibility for providing Quality Control (QC) for project during both design and construction phases. Quality Control includes, but is not limited to, such functions as:

1. Assuring only latest revisions of design and other documents used for construction (e.g., Shop Drawings, catalog cuts, schedules) are being used by project staff.

2. Inspection of materials and equipment delivered to the site.

3. Inspection and maintenance of materials and equipment in storage.

4. In progress and Final Inspection of the constructed product.

5. Manufacturer's Certification of Installation for service intended.

6. Reporting on work in progress daily.

B. The Contractor shall have a QC System and sufficient QC staff, in place in the design team office and on the jobsite always that work is underway.

C. The Contractor is responsible for controlling the quality of the work, including that portion of the work performed by Engineer of Record, the Cogeneration system manufacturer and on-site Subcontractors. The Contractor is also responsible for assuring that suppliers and manufacturers providing materials and products to be incorporated into the work satisfy the specified quality, provide required documentation, and provide those services as specified within the technical portions of the specifications.

D. The Contractor shall develop and submit a Quality Control Plan which identifies the reporting structure of the QC organization, defines the procedures to be implemented by the Contractor to assure the specified quality is achieved, and details the daily reporting protocol. Within 20 calendar days of the Notice to Proceed (NTP), the Contractor shall submit their proposed Quality Control Plan. The Engineer will schedule a review meeting of the outline within one week of receipt of the plan outline. Final submission of the quality control plan shall be made no later than 10 calendar days following the review meeting.

E. The Contractor and Engineer will coordinate materials testing for cast-in-place concrete, earthwork, and paving.

1.0.2. MATERIALS AND EQUIPMENT

A. The Contractor shall maintain control over procurement sources to ensure that materials and equipment conform to specified requirements.

B. The Contractor shall comply with manufacturer's instructions regarding all facets of materials and/or equipment movement, storage, installation, testing, startup, and operation.

C. The Contractor shall prepare, complete, and maintain all equipment, pipe, and testing logs that document the dates and disposition of each specific test conducted. The logs will be comprised of a summary sheet that is corroborated by individual test report

forms that document the specific tests. The individual test report form will be provided by the Engineer.

1.0.3. MANUFACTURER'S TECHNICAL REPRESENTATIVE

A. When specified in the technical specification sections, the Contractor shall arrange for and provide technical representation directly from the manufacturers of respective equipment items or components.

B. If, in the opinion of the Engineer, the Manufacturer's Representative fails to satisfy the terms of this Specification section, the Engineer may direct the Contractor to replace the Representative with a different representative, and those hours expended by the disapproved representative will not be counted against the service hours specified for the system/unit/component.

PART 2 – PRODUCTS 2.0.1.

QUALITY CONTROL PLAN

A. The Quality Control Plan shall be a formal document prepared under the direction of the Contractor. The Plan will be the basis by which the Engineer will monitor the QC effort associated with executing the work.

B. The Plan shall address the Quality Control Organization and the roles each member of the organization plays in satisfying the quality requirements of the work.

C. Included within the plan will be basic guidelines associated with the checking and monitoring of work as it progresses and how the guidelines will be used by Contractor's supervisors and representatives to provide the required quality.

D. The process for notification of quality concerns shall be included in the Plan.

2.0.2. REPORTS

A. Monthly Quality Control Summary that addresses the following:

1. Certification by Contractor that all work not specifically cited by a NonConformance Report satisfies the requirements of the Contract Documents.

2. Summary table identifying all non-conformance notices and their respective current status.

B. Certificate of Proper Installation shall address installation of equipment items.

PART 3 – EXECUTION 3.0.1.

QUALITY CONTROL

A. Quality control is the responsibility of the Contractor, and the Contractor shall maintain control over construction and installation processes to assure compliance with specified requirements.

B. Means and methods of construction and installation processes are the responsibility of the Contractor, and at no time is it the intent of the Engineer to supersede or void that responsibility. In the event there is a degree of uncertainty that the process observed or planned will accomplish the required quality, the Engineer will refer to the Quality Control Plan and initiate discussion with the person primarily responsible for the process or installation in question.

C. Prepare and submit weekly Quality Control activity reports to the Engineer.

D. Monthly Quality Control Summaries are to be prepared and submitted to the Engineer with the Contractor's Partial Payment request for the respective period.

END OF SECTION

01510 TEMPORARY UTILITIES

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Provide temporary facilities required, which may include, but not limited to, the following:

1. Contractor's field office, telephone and storage sheds.

2. Temporary water service.

3. Temporary sanitary service.

4. Temporary electrical service.

B. For additional requirements on Temporary Facilities refer to Section 01100 "Special Project Requirements".

C. Requirements of Regulatory Agencies:

1. Obtain and pay for permits as required by governing authorities.

2. Comply with federal, state and local codes and regulations.

1.0.2. TEMPORARY ELECTRICITY

A. The City will not furnish electric power for this project. All electrical driven equipment, including electrical welders, shall be served by the temporary electrical service to be provided by the Contractor.

B. The Contractor shall supply extension cords, ground fault circuit interrupters, and safety equipment necessary to protect his workmen and plant personnel.

C. The Contractor shall obtain a power source for temporary electricity from electrical generators or other approved means. Furnish, install and maintain temporary electric power service for construction needs throughout construction site as necessary.

1. Power centers for miscellaneous tools and equipment used in construction work.

2. Power for construction equipment.

3. Power for testing and checking equipment.

4. Power for welding units and for other equipment having special power requirements.

D. Capacity:

1. Adequate electrical service distribution for construction use by all trades and Field Offices during construction period.

2. Notify FPL if unusually heavy loads, such as welding, pumps, high service temporary pump, and other special power requirements, will be connected.

E. Maintain strict supervision of use of temporary services.

1. Enforce conformance with applicable standards.

2. Enforce safe practices.

3. Prevent abuse of services.

1.0.3. TEMPORARY SANITARY FACILITIES

A. Furnish, install and maintain temporary sanitary facilities for use throughout construction period.

1. Enclosed toilet facilities for construction personnel.

2. General employee washing facilities.

B. Toilet Facilities: Fixed or portable chemical toilets shall be provided wherever needed for the use of Contractor's employees. Toilets at construction sites shall conform to the requirements of Subpart D, Section 1926.51 of the OSHA Standards for Construction.

C. Minimum number of fixtures:

1. Toilets and Urinals:

For less than 20 employees: 1 toilet.
For 20 or more employees: 1 toilet and 1 urinal per 40 workers.

2. Washing Facilities: Adequate for number of employees, for type of work requiring washing facilities.

D. Maintain strict supervision of use of facilities:

1. Enforce conformance with applicable standards.

2. Maintain service and clean facilities.

3. Enforce proper use of sanitary facilities.

E. Cost of Installation and Operation:

1. Pay costs of temporary sanitary facilities, including costs of installation, maintenance and removal.

2. Costs of Water: As specified in Temporary Water.

3. Pay service charges for use of portable units.

F. Facility Locations:

1. Within the project site.

2. At Field Offices

3. Toilet and washing facilities:

Secluded from public observation.
Convenient for use of personnel in relation to work stations.

4. Obtain acceptance of the Engineer for all locations.

G. Enclosure for Toilet Facilities:

1. Weatherproof, sight proof, sturdy temporary enclosures.

2. Insect proof screening, adequate natural ventilation.

H. Sewer Connection: The Contractor shall coordinate with the City's Public Works Department for obtaining sewer connection and shall pay permit and sewer usage charges.

PART 2 – PRODUCTS 2.0.1.

MATERIALS

A. General: Materials may be new or used, but must be adequate for purpose required, must be sanitary and must not violate requirements of applicable codes. Materials in contact with potable water must be AWWA/NSF 61 listed.

2.0.2. ELECTRICITY

A. Provide required facilities, including transformers, conductors, poles, conduits, raceways, breakers, fuses and switches.

B. Provide appropriate enclosures for environment in which used, in compliance with NEMA standards.

2.0.3. DRINKING WATER FACILITIES

A. Portable Containers

1. Tightly closed and equipped with dispensing tap.

2. Clearly label contents.

3. Do not use for other purposes.

4. Provide single service disposable cups, with sanitary container for unused cups, and receptacles for used cups.

2.0.4. SANITARY FACILITIES

A. Toilet Facilities:

1. Portable toilets; either:

a. Chemical toilets.

b. Reticulating toilets.

c. Combustion toilets.

2. Toilet Tissue: Provide at each toilet, on suitable dispenser.

PART 3 – EXECUTION 3.0.1.

GENERAL

A. Obtain Engineer's approval of planned installations.

B. Install work in a neat and orderly manner.

C. Make structurally sound throughout.

D. Maintain to provide continuous service.

E. Modify and extend service as work progress requires.

3.0.2. TEMPORARY WATER

A. Locate piping and outlets.

1. Provide service convenient to work stations.

B. Avoid interference with:

1. Traffic and work areas.

2. Materials handling equipment.

3. Storage areas.

C. Do not run piping on floor or on ground.

D. When necessary to maintain pressure, provide temporary pumps, tanks and compressors.

3.0.3. TEMPORARY ELECTRICITY

A. Service and distribution may be overhead or underground.

B. Locate to avoid interference with:

1. Traffic and work areas.

2. Cranes.

3. Material handling equipment.

4. Storage areas.

C. Do not run branch circuits on floor or on ground.

D. Wire all safety devices required for operation of equipment.

E. Check operation of safety devices.

3.0.4. TEMPORARY SANITARY FACILITIES

A. Portable Toilets:

1. Erect securely and anchor to prevent dislocation.

2. Service as often as necessary to prevent accumulation of wastes and creation of unsanitary conditions.

B. Washing Facilities: Provide faucet

3.0.5. REMOVAL

A. Completely remove temporary materials and equipment upon completion of construction.

B. Clean and repair damage caused by installation and restore to specified or original condition.

END OF SECTION

01530 PROTECTION OF EXISTING FACILITIES

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The Contractor shall exercise extreme care and protect all existing structures and utilities, when working in proximity so as not to disturb the structures. Repair or replacement of any property and/or structures damaged during the construction of this project shall be the sole responsibility of the Contractor. Costs involved in the replacement or repair will not be reimbursed by the City. The Contractor shall be responsible for coordinating his work with the work to be done by FPL or their Contractor.

B. Protection of Property Remaining in Place:

1. Property obstructions which are to remain in place, such as buildings, poles, walls, posts, bridges, etc., are to be carefully protected from damage and are not to be displaced. Any damage to such obstructions noted to remain in place shall be repaired by the Contractor at no additional cost to the City or Owner.

2. Should structures be encountered which interfere with the work, the City or designee shall be consulted immediately in order for a decision to be made on the relocation of the work so it will clear the obstruction, if the obstruction cannot be relocated.

C. The underground utilities, structures and other facilities shown on the plans are located according to the best information available but may vary by several feet from both the position and elevation shown. The Contractor shall explore far enough in advance of his main trench to determine the exact location and condition of such utilities, structures or facilities so that, before the pipe is installed, the Engineer may change the line or grade of the pipe, should that become necessary to avoid a conflict.

1.0.2. GENERAL CONSIDERATIONS

A. All cost for changing the grade of the proposed main downward two feet-six inches or less in order to clear obstructions located differently than shown on the plans, or to

clear obstructions not shown on the plans but the location of which could have become known or should have become known by proper observation of field conditions or the proper exploratory procedure, shall be included in the prices bid under the various items of the Proposal and no additional compensation will be allowed.

B. Additional cost, if any, for changing the grade of the proposed main downward more than two feet-six inches, for the same reasons, will be paid for as "Extra Work" in accordance with "Extra Work and Payment Therefore" of the Special Conditions.

C. Changing the grade of the proposed main by rising deflections, or the alignment by horizontal deflections, will not be considered as extra work, or extra cost, to the Contractor, and in some cases a credit to the City may be warranted.

D. Where the Quotation contains Items for installing main in specific depth ranges, the main shall be paid for at the actual depth range installed. However, the provisions of paragraphs one and two of this Section shall apply and any depth increase caused by a lack of timely and sufficient exploration by the Contractor shall be at his expense. In such instance, the main shall be paid for as if installed at the invert elevations originally shown on the Plans.

E. In all cases where the main is deflected either horizontally or vertically, and the Engineer requires additional work and items such as paving, air release valve assemblies, and similar items for which a pay item was established in the Proposal, then such additional work and items will be paid for at the prices bid.

F. The Contractor shall determine the locations of recent additions to the systems not shown on the plans. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from his activities. The location of all overhead utilities shall be verified, and the Engineer notified of any conflict which might occur. The Contractor shall be responsible for determining which poles will need shoring during excavation and shall provide such shoring and support as is required.

G. Where it is necessary to temporarily interrupt house or building services, the Contractor shall notify the house or building owner or occupant, both before the interruption and again immediately before service is resumed. Before disconnecting any pipes or cables, the Contractor shall obtain permission from the Owner, or shall make suitable arrangements for their disconnection by the Owner. The Contractor shall be responsible for any damage to any such pipes, conduits or cables, and shall restore them to service promptly as soon as the work has progressed past the point involved.

H. Various drainage culverts and drainage ditches may be encountered along the route of the work. Any culverts which are disturbed, damaged or removed shall be repaired,

restored or reinstalled. The Contractor shall document any existing damage to the drainage systems, or if it needs cleaning, prior to doing any work in the vicinity, so he will not be held responsible. Drainage ditches shall be restored to the original cross sections existing prior to construction of this work. Ditches shall be left clean and free of all excavated materials or other materials deposited in them as a result of this construction. All existing headwalls, removed or damaged as a result of this construction, shall be restored as directed by the Engineer, and the work shall be considered an incidental item and the cost included in the other items of the quotation.

I. All existing drainage structures and piping shall be considered clean at the start of construction. The Contractor shall check to verify that this is so. The Contractor should notify the governing agency of any damaged or dirty structures or piping to avoid repair or cleaning at his expense. Copies of such notices shall be sent to the Engineer.

1.0.3. RELOCATION OF EXISTING UTILITIES

A. The relocation of existing utilities, as noted on the plans, or for the convenience of the Contractor shall be the responsibility of the Contractor. This work shall be completed by either the forces of the existing utility or the Contractor's forces at the discretion of the responsible utility. If the work is to be performed by the Contractor, all work shall be done in accordance with the utility company's requirements. Under no circumstances shall the Contractor be authorized extra payment for this work, and all cost for the relocation shall be the responsibility of the Contractor.

B. The Contractor shall also be responsible for the coordination of all existing utility relocations with the appropriate utilities. Where temporary supports or protective encasements are required during the construction, the Contractor shall be responsible for this work at no additional cost.

C. Any conflicts between the field investigation and the information shown on the plans shall be brought to the immediate attention of the Engineer. There shall be no additional payment for adjustments in grades or location resulting from locations of existing utilities.

D. Various storm sewer lines and inlets and slab-covered drainage ditches that conflict with the proposed construction may require adjustment, relocation or removal and reinstallation. This work shall be performed as directed by the Engineer, and the work shall be considered an incidental item and the cost included in the items listed in the quotation.

E. Representatives of utility companies, the railroad companies, the traffic and transportation authorities, etc., shall be notified in accordance with the provisions set forth in the relevant sections of the Specifications and the permitting documents.

F. Notify all utility companies that are affected by the construction operation at least fortyeight (48) hours in advance. Under no circumstance expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose and provide temporary support for all existing underground utilities and utility poles where necessary.

G. Absolutely no extra compensation will be allowed for construction problems created by utility poles of whatever size, overhead electric, telephone or other lines, whether shown on the Plans or not. The Contractor is solely responsible for discovering such items in the field prior to bidding and including all costs for such work in the prices bid.

1.0.4. PROTECTION OF UTILITIES TO REMAIN IN PLACE

A. The work area may have existing utilities, such as, but not limited to irrigation, phone, electrical, water, sewer, storm sewer, and gas lines. It shall be the responsibility of the Contractor to verify the location of all such utilities, structures, etc. by hand excavation or other appropriate measures before performing any work that could result in damage or injury to persons, utilities, structures, or property. The Contractor shall make a thorough search of the site for utilities before work is commenced in any particular location. The Contractor shall take special consideration to protect the existing water main, force main and power line along the project location to avoid service disruptions.

B. During construction, the Contractor shall protect the existing and proposed water main and force main using steel plates, as indicated in the drawings, until site work is completed and final grade is achieved. The Contractor shall be responsible for the repair of any damages caused to these pipes during construction at no additional costs to the City.

C. The Contractor shall take immediate steps to repair, replace, or restore all services to any utilities or other facilities which are disrupted at the fault of the Contractor. Further, the Contractor shall engage any additional outside repairs on a continuous "around the clock" basis until services are restored. The Contractor shall also provide and operate any supplemental temporary services to maintain uninterrupted use of the facilities. All costs involved in the repairs and restoring of disrupted service resulting from negligence on the part of the Contractor shall be borne by the Contractor and shall be fully responsible for any and all claims resulting from the damage.

D. Should utilities be encountered which interfere with the work, the City or designee shall be consulted immediately in order for a decision to be made on the relocation of the work so it will clear the obstruction, if the obstruction cannot be relocated.

E. Prior to the start of construction, the contractor shall comply with F.S. 553.851 for the protection of underground gas lines.

F. When power poles are adjacent to any proposed utility, the Contractor shall provide proper shoring or other suitable support during construction. The shoring and support methods shall be approved by the utility company engineering department. The cost of shoring will be included in the overall project cost.

G. The Contractor shall not purposefully disrupt or disconnect any type of utility whatsoever without first obtaining the written permission of the City. Requests for disconnection must be in writing and received by the City at least 72 hours prior to the time of the requested interruption.

1.0.5. PROTECTION OF TREES REMAINING IN PLACE

A. Construction can potentially damage the existing trees confined within the construction zone. Besides their aesthetic value, some trees are valuable and may be environmentally protected. Mangroves and mangrove associated species (as defined by Miami-Dade County Code of Ordinances) are the jurisdiction of MiamiDade County and would fall under the Miami-Dade County Code of Ordinances, Chapter 24, Division II.

B. Trees can be an important part of the ecological environment of the surrounding area. Measures should be in place to protect trees whenever necessary, including conservation of the canopy.

C. Where directed by the City, desirable trees within the roadway area shall be trimmed, protected, and left standing. Branches of trees extending over the area occupied by the roadway shall be trimmed as directed, to give clear height of 14 feet over vehicular areas and 8 feet over pedestrian areas.

D. When pruning cuts or root pruning to existing trees is shown in the Plans, work is to be supervised on site by an International Society of Arboriculture (ISA) or American Society of Consulting Arborists (ASCA) Certified Arborist and performed in accordance with American National Standards Institute (ANSI).

E. All trees found within a FDOT designated road shall comply with the appropriate FDOT index for tree protection barriers. All other tree protection shall be in accordance with the

F. For all areas both inside and outside the earthwork area, the Contractor shall not deface, injury, or destroy trees, nor remove or cut them without prior approval via a tree removal permit from the City of Opa-Locka Any accidental damage to a tree shall immediately be reported to the City of Opa-Locka for evaluation for public safety and possible new and additional permit requirements/work. An after-the-fact tree removal permit may be required.

G. The Contractor shall understand all ANSI tree care standards prior to the start of earthwork. All necessary permitted above and below ground tree work shall follow the appropriate ANSI standards for tree care.

H. Tree relocation, when required, shall be in accordance with CITY CODE

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The Contractor shall furnish all material, labor, tools, equipment, plant, appliances and services necessary to complete all demolition, modification and relocation work required in the drawings and specified herein. Examine the various drawings, visit the site and determine the extent of work affected therein and all conditions under which he is required to perform the various operations.

B. The Work specifically covered under this Section consists of the removal and disposal of existing structure, appurtenances, concrete pavement, concrete sidewalk, slope pavement, ditch pavement, curb and curb and gutter. The items to be removed shall be: (1) those items shown in the Plans to be removed; (2) those found within the limits of the area to be cleared and grubbed and directed by the City or designee to be removed; (3) those items which it is necessary to remove in order to construct new structures, utilities, and other appurtenances or obstructions which may be designated in the plans.

C. Demolition shall be constructed in such a way as to leave no obstructions to any proposed new structures or to any waterways. Pilings shall be pulled or shall be cut off or broken off at least 2 feet below the finish grade line. (In the event that the Plans indicate channel excavation to be done by others, the finish ground line shall be considered as the limits of such excavation.) For material which are to remain the property of the City or are to be salvaged for utilization in temporary structures, the removal shall be in such way as to avoid damage to such materials, and all bolts, nails, etc., shall be entirely removed from timbers to be so salvaged; also such salvaged structural steel members shall be marked for identification, as directed. Retaining walls and drainage structures are specifically not included in the Work covered under this Section.

1.0.2. GENERAL CONSIDERATIONS

A. Demolition, modification, removal and relocation work shall be coordinated with the City, shall be performed in an agreed upon sequence to minimize down time at the site.

B. Promptly remove all demolished materials and debris from the site. No demolished materials shall be kept at the plant site for more than 24 hours.

C. Demolition shall result in the complete removal and disposal of existing structures and appurtenances from the site as indicated on drawings and the cleanup after completion of the demolition work.

D. The cutting and removal of existing work necessary for modifications and installation of new work shall be made with a minimum of damage to the work that is to remain. Any damage done to existing facilities which are to remain shall be repaired at the Contractor's expense to the satisfaction of the City.

E. Surfaces of seals visible in the completed work shall be made to match as nearly as possible the adjacent surfaces.

F. Non-shrink grout shall be used for setting wall casting, sleeves, leveling pump bases, doweling anchors into existing concrete and elsewhere as required.

G. Follow other specific instructions for the modification work given in other sections of these specifications and/or as shown on the drawings.

H. Verify exact location, material, alignment, joint, etc. of existing piping and structure prior to making the modifications and connections called out in the drawings. The verifications shall be performed with adequate time to correct any potential alignment or other problems prior to the actual time of connection.

I. Dismantle and remove all existing equipment, piping and other appurtenances required for the completion of the work. Where called for or required, cut existing pipeline for the purpose of making connections thereto. Anchor bolts for equipment and structural steel removal shall be cut off one inch below the concrete surface. Surface shall be properly repaired and finished.

J. Where necessary or required for the purpose of making connections, cut existing pipelines in a manner to provide an approved joint. Where required, weld beads, flanges or provide the specified couplings, all as required.

K. Site shall be left in a clean condition satisfactory to the Engineer, free from demolished materials, rubbish or debris. Site shall be graded to meet adjacent contours and provide flow for surface drainage.

L. Restore items intended to remain that have been damaged by demolition work.

M. Items intended to remain that have been damaged by demolition work shall be restored to original or better condition.

N. All interrupted utility services shall be returned to service, and temporary services disconnected, unless otherwise specified. **PART 2 – PRODUCTS**

2.0.1. STRUCTURES TO BE REMOVED

A. The work specifically covered under this Section consists of the removal and disposal of the material from existing structures.

B. The structures to be removed shall be:

1. Those structures, or portions of structures, shown in the plans to be removed.

2. Those found within the limits of the area to be cleared and grubbed, and directed by the Engineer to be removed.

3. Those structures, or portions of structures, which it is necessary to remove in order to construct new structures, utilities and other appurtenances or obstructions which may be designated in the plans. **PART 3 – EXECUTION**

3.0.1. METHOD OF REMOVAL

A. The structures shall be removed in such a way as to leave no obstructions to any proposed new structures or to any waterways.

B. For material which are to remain the property of the City or are to be salvaged for utilization in temporary structures, the removal shall be in such way as to avoid damage to such materials, and all bolts, nails, etc., shall be entirely removed from timbers to be so salvaged; also such salvaged structural steel members shall be marked for identification, as directed.

3.0.2. REMOVAL OF EXISTING PAVEMENT

A. The work specified in this Section consists of removing and disposing of existing concrete pavement, concrete sidewalk, slope pavement, ditch pavement, curb and curb and gutter, where shown in the plans or directed by the Engineer to be removed or where required to be removed because of the construction operations.

B. Retaining walls and drainage structures are specifically not included in the work covered under this Division.

END OF SECTION

01550 SITE ACCESS AND STORAGE

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The culvert replacement work is to be performed along Sesame Street, between the intersections with Atlantic Avenue and NW 135th Street, Opa-Locka, Florida 33054. The project's owner is the City of Opa-Locka.

1.0.2. EXISTING UTILITIES

A. Protection of, and relocation of existing utilities, structures and other facilities shall be in accordance with Specification *"01530 - Protection of Existing Facilities"*.

B. The relocation of existing utilities, as noted on the plans, or for the convenience of the Contractor, shall be the responsibility of the Contractor. This work shall be completed by either the forces of the existing utility or the Contractor's forces at the discretion of the responsible utility. If the work is to be performed by the Contractor, all work shall be done in accordance with the utility company's requirements. The Contractor shall also be responsible for the coordination of all existing utility relocations with the appropriate utilities. Where temporary supports or protective encasements are required during the construction, the Contractor shall be responsible for this work at no additional cost. Under no circumstances shall the Contractor be authorized extra payment for this work, and all cost for the relocation shall be the responsibility of the Contractor.

C. Any conflicts between the field investigation and the information shown on the plans shall be brought to the immediate attention of the Engineer.

1.0.3. SITE ACCESS AND STORAGE

A. The City reserves the right to enter upon, and to use, any and all portions of the work performed hereunder (or under its other Contracts), whether completed or not, as may be required.

B. Highway Limitations: The Contractor shall make its own investigation of the condition of available public and private roads and of clearances, restrictions, bridge load limits,

and other limitations affecting transportation and ingress and egress to the site of the work. It shall be the Contractor's responsibility to construct and maintain any haul roads required for its construction operations.

C. Temporary Crossings: Continuous, unobstructed, safe, and adequate pedestrian and vehicular access shall be provided to fire hydrants, parking lots, Vehicular access to all production facilities shall be maintained except when necessary construction precludes such access for reasonable periods of time.

D. Street Use: Nothing herein shall be construed to entitle the Contractor to the exclusive use of any public street, alleyway, or parking area during the performance of the work hereunder and it shall conduct its operations to not interfere unnecessarily with the City or any other authorized work of utility companies or other agencies in such streets, alleyways, or parking areas. No street shall be closed plant operations without first obtaining permission of the Engineer and the City. Where excavation is being performed in any streets, one lane shall always be kept open to traffic, unless otherwise indicated. Toe boards shall be provided to retain excavated material if required by the Engineer or the City. Fire hydrants on or adjacent to the work shall be kept accessible to fire-fighting equipment. Temporary provisions shall be made by the Contractor to assure the use of sidewalks and the proper functioning of gutters, storm drain inlets, and other drainage facilities.

E. Additional Facilities: Access to other facilities within the project site shall be allowed by the Contractor for City's staff conduct their operation and maintenance activities. Continuous, unobstructed, safe and adequate pedestrian and vehicular for the City's staff to access facilities within the project site such as the electrical building, emergency generator, water tanks and Pump Station 23 is required.

1.0.4. CONTRACTOR WORK AND STORAGE AREA

A. The Contractor may utilize private warehouse and/or office space as a storage area and/or construction field offices.

B. The Contractor shall submit to the Engineer for approval, a proposed plan and layout for all field offices, temporary facilities, and parking both for on the project site and on any additional lands obtained by the Contractor for its use during construction of the project. Prior to commencing any preparation remove, relocate and protect where necessary all existing underground and above ground facilities, pipelines, sprinkler systems, sod and all other existing installations. All these installations shall be restored to their initial conditions.

C. The Contractor shall construct and use a separate storage area for hazardous materials used in constructing the work.

1. For the purpose of this paragraph, hazardous materials to be stored in the separate area are products labeled with any of the following terms: Warning, Caution, Poisonous, Toxic, Flammable, Corrosive, Reactive, or Explosive. In addition, whether or not so labeled, the following materials shall be stored in the separate area: diesel fuel, gasoline, new and used motor oil, hydraulic fluid, cement, paints and paint thinners, 2 part epoxy coatings, sealants, asphaltic products, glues, solvents, wood preservatives, sand blast materials, and spill absorbent.

2. Hazardous materials shall be stored in groupings according to the Material Safety Data Sheets.

3. Contractor shall develop and submit to the Engineer a plan for storing and disposing of the materials above.

4. Contractor shall obtain and submit to the Engineer a single EPA number for wastes generated at the site.

5. The separate storage area shall meet the requirements of authorities having jurisdiction over the storage of hazardous materials.

6. Hazardous materials that are delivered in containers shall be stored in the original containers until use. Hazardous materials delivered in bulk shall be stored in containers which meet the requirements of authorities having jurisdiction.

1.0.5. PARKING

A. The Contractor shall be responsible for making its own arrangements for parking of its direct employees, Subcontractors, vendors, etc. as may be necessary either on site or offsite.

B. Traffic and parking areas shall be maintained in good conditions, free of excavated material, construction equipment, mud, and construction materials. The Contractor shall repair breaks, potholes, low areas which collect standing water, and other deficiencies.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01560 TEMPORARY ENVIRONMENTAL CONTROLS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. For any work conducted in a contaminated area within the project boundaries where hazardous materials or hydrocarbons have been encountered, were previously known to exist, or is suspected by the Contractor or the City Inspector, the Contractor must comply with all applicable requirements of OSHA, EPA, FDEP, Miami-Dade County Regulatory and the City.

B. All work defined by this Division, including work less than one (1) acre in size, that has the potential to impact the City's Municipal Separate Storm Water System (MS4), and/or adjacent properties, is required to employ sediment and erosion control measures that are in accordance with Florida Storm Water Erosion and Sedimentation Control Inspector's Manual, latest revision, and in accordance with Miami-Dade County Department of Environmental Resources Management.

C. All construction activity that results in the disturbance of equal to or greater than one (1) acre is required to obtain coverage under the Florida Department of Environmental Protection's Generic Permit for Storm Water Discharge from Large and Small Construction Activities (CGP).

1.0.2. SPECIALIZED CONSTRUCTION AREA

A. Specialized construction areas are defined as areas where contaminants are discovered and require construction by personnel qualified by training and equipped with personal protective equipment for such work.

B. Work in specialized construction areas shall be carried out by personnel qualified by training and equipped for such activities. These personnel shall be either Subcontractors with licensing and certification as specialists in this type of construction or the Contractor's own personnel who have taken and been certified as having

passed the required training course(s). Licensing and certifications shall be submitted to the City for verification and shall in all cases be satisfactory to both, the City and other authorities with jurisdiction.

1.0.3. DUST ABATEMENT

A. All permittees, contractors, owners, operators, or other persons involved in construction activities shall refer to applicable sections of Local, State, and Federal regulations on dust control for additional guidance, including but not limited to the Miami-Dade County Code of Ordinances.

B. All persons involved in construction activities shall take measures to control dust from operations and prevent spillage of excavated materials on public roads.

C. All persons involved in construction activities shall remove spillage of excavated materials, debris, and dust from public roads by methods approved by the City or designee.

D. All persons involved in construction activities shall provide temporary dust-proof partitions where required to protect unaltered portions of existing structures and facilities and as directed by the City or designee. Temporary partitions shall be provided where demolition work is required to protect equipment and material and shall consist of plastic sheeting (6 mil).

E. All persons involved in construction activities shall apply water at locations, quantities, and frequencies required by the City or designee to control dust for nuisance prevention to the City and properties in the vicinity of the site. The frequency of watering will be determined by weather conditions and the erodibility of the soil. If additives in the water are used to increase its dust suppression properties, the chemical should have no adverse environmental impact on adjacent water bodies.

F. The Contractor shall prevent its operation from producing dust in amounts damaging to property or causing a nuisance to persons occupying buildings in the vicinity of the project Site. The Contractor shall employ measures to prevent fugitive dust. The Contractor shall be responsible for any damage resulting from dust originating from its operations.

G. Storage Piles: Enclose, cover, water (as needed), or apply non-toxic soil binders according to manufacturer's specifications on material piles (i.e. gravel, sand, dirt) with a silt content of 5 percent or greater.

H. Active Areas of Site: Water active construction areas and unpaved roads as needed and as requested by Engineer to prevent the propagation of dust.

I. Inactive Areas of Site: Apply non-toxic soil stabilizers according to manufacturer's specifications to inactive construction areas, or water as needed to maintain adequate dust control.

J. Vehicle Loads: Cover or maintain at least 2-feet of freeboard vertical distance between the top of the load and the top of the trailer sides on trucks hauling dirt, sand, soil, or other loose materials off of the site.

K. Roads: When there is visible track-out onto a paved public road, install wheel washers where the vehicles exit and enter onto the paved roads and wash the undercarriage of trucks and any equipment leaving the site on each trip. Sweep the paved street at the end of each shift with a water spray pick-up broom-type street sweeper as necessary or as directed.

L. Vehicle Speeds: Maintain vehicle speeds to 10 mph or less.

M. Additional dust control BMPs include but are not limited to the following.

1. Prevention of dust generation is preferable to applying dust suppression measures. Ensure in the project schedule that the area of cleared land is minimized during the drier months of the year, when dust generation is at its greatest.

2. The soil shall be maintained in a sufficiently damp condition to prevent loose grains of soil from becoming dislodged. The soil shall be completely crusted over by application of water or completely covered with clean gravel or treated with an approved dust suppressant.

3. Ensure that smooth surfaces are deep ripped and left rough and cloddy to reduce the wind velocity at the soil surface.

4. Construct wind fences if appropriate for the site. As a contingency measure, in areas that do not have access to a water supply, water stored on-site should never be less than fifty percent of disturbed land surface. Wherever watering is used to suppress dust, ensure it does not create contaminated runoff that will contaminate surface waters.

5. Use barriers where required to prevent the migration of sawdust or particulates from sanding or surface preparation activities during construction.

1.0.4. SEDIMENTATION ABATEMENT

A. The Contractor shall be responsible for collecting, storing, hauling, and disposing of spoil, silt, and waste materials in compliance with applicable federal, state, and local rules and regulations and the Contract Documents.

B. Install and maintain erosion and sediment control measures, such as swales, grade stabilization structures, berms, dikes, waterways, filter fabric fences, and sediment basins.

C. Filter fabric barrier systems, if used, shall be installed in such a manner that surface runoff will percolate through the system in sheet flow fashion and allow sediment to be retained and accumulated.

D. Remove and dispose of sediment deposits at the designated spoil area. If a spoil area is not indicated, dispose of sediment off-site at a location not in or adjacent to a stream or floodplain. Sediment to be placed at the spoil area should be spread evenly, compacted, and stabilized. Sediment shall not be allowed to flush into a stream or drainage way.

E. Maintain erosion and sediment control measures until final acceptance or until requested by the Engineer to remove it.

1.0.5. RUBBISH CONTROL

A. During the progress of the work, the Contractor shall keep the site and other areas for which it is responsible in a neat and clean condition and free from any accumulation of rubbish. The Contractor shall dispose of rubbish and waste materials of any nature and shall establish regular intervals of collection and disposal of such materials and waste. The Contractor shall also keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Disposal of rubbish and surplus materials shall be off the site in accordance with local codes and ordinances governing locations and methods of disposal and in conformance with applicable safety laws and the requirements of Part 1926 of the OSHA Safety and Health Standards for Construction.

B. It is important to maintain the construction site in a neat and satisfactory condition during the during construction and after construction has been completed. B. During construction, the Contractor shall regularly clean up all rubbish, surplus materials, and the adjacent areas affected. Unneeded construction equipment should be removed and all damages repaired so that the public and property owners will be inconvenienced as little as possible.

C. Any material or debris that has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes structures, or elsewhere during the course of the Contractor's operations must be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc., should, upon completion of the Work, be left in a clean and neat condition.

D. The Contractor shall perform the cleanup work on a regular basis and as frequently as ordered by the City or designee. Basic site restoration in a particular area shall be accomplished immediately following the installation or completion of the required facilities in that area. Furthermore, such work shall also be accomplished, when ordered by the City or designee, if partially completed facilities must remain incomplete for some time period due to unforeseen circumstances.

E. Upon failure of the Contractor to perform periodic clean up and basic restoration of the site to the City or designee's satisfaction, the City or designee may, upon five (5) days prior written notice to the Contractor, employ such labor and equipment as it deems necessary for the purpose, and all costs resulting there from shall be charged to the Contractor and deducted from amounts of money that it may be due.

F. On or before the completion of the Work, the Contractor shall tear down and remove all temporary buildings and structures; remove all temporary works, tools, and machinery or other construction equipment; remove, acceptably disinfect, and cover all organic matter and material containing organic matter in, under, and around houses and other buildings; remove all rubbish from any grounds which has been occupied; and leave roads and all parts of the premises and adjacent property affected by work operations in a neat and satisfactory condition.

G. Upon completion of the Work, the Contractor shall remove from the sites of the subsurface explorations all plant, machinery, tools, equipment, temporary work, and surplus materials; remove all rubbish from any grounds which has been occupied; and leave the roads and all parts of the premises and adjacent property affected by work operations in a neat and satisfactory condition.

H. The Contractor shall thoroughly clean all materials and equipment installed, and, upon completion of the Work, deliver it undamaged and in fresh and new-appearing condition. All mechanical equipment should be left fully charged with lubricant and ready for operation.

I. The Contractor shall restore or replace, when and as directed by the City or designee, any public or private property damaged by work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of

operations. To this end, perform as required all necessary highway or driveway, walkway, and landscaping work. Suitable materials, equipment, and methods should be used for such restoration. The restoration of existing property or structures should be done as promptly as practicable as work progresses and should not be left until the end of the contract period.

1.0.6. SANITATION

A. Toilet Facilities: Fixed or portable chemical toilets shall be provided wherever needed for the use of employees. Toilets shall conform to the requirements of Part 1926 of the OSHA Standards for Construction.

B. Sanitary and Other Organic Wastes: The Contractor shall establish a regular daily collection of sanitary and organic wastes. Wastes and refuse from sanitary facilities provided by the Contractor or organic material wastes from any other source related to the Contractor's operations shall be disposed of away from the site in a manner satisfactory to the Engineer and in accordance with Laws and Regulations pertaining thereto.

1.0.7. CHEMICALS

A. Chemicals used on the work or furnished for facility operation, whether defoliant, soil sterilant, herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, shall show approval of either the U.S. Environmental Protection Agency or the U.S. Department of Agriculture. Use of such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer.

1.0.8. ADDITIONAL ENVIRONMENTAL CONSIDERATIONS – AFFECTED SOIL

A. Excavation of affected soil shall be accomplished as described in Section 02220 "Excavation – General".

B. Affected soil must be placed on an impermeable barrier when temporarily stockpiled. All stockpile leachate or runoff must be collected for disposal in accordance with applicable federal, state, and local regulations. Soils designated for removal and disposal shall be prepared for shipment, transported, and disposed of in accordance with the requirements of this Section.

C. Affected soils shall be processed at a state licensed facility. These soils shall be transported and disposed of in accordance with federal, state, and local regulations. The Owner shall be responsible for all soil analyses required for transportation and disposal.

D. The Owner shall be responsible for testing soil which has been incinerated to certify the treated soil meets applicable federal, state, and local regulations for final disposal.

E. Free Petroleum Product

1. Some free petroleum products which may be partly or entirely diesel fuel or gasoline may be encountered during excavation or removal of affected soil. The Contractor shall remove free petroleum product, if necessary, when a separate floating phase greater than 0.10-inch thick is present as required by health and safety considerations. The free petroleum product shall be removed by skimming, pumping to an oil/water separator, or other approved methods. The Contractor shall take reasonable precautions to ensure that solids are not entrained in the pumping process.

2. Free petroleum products shall be transported and disposed by the Owner in accordance with federal, state, and local regulations. The Owner is responsible for any laboratory analyses required for disposal of the free petroleum products.

F. Transport and Disposal

1. Transport Regulations: The Owner shall be responsible for the loading, labeling, placarding, marking, weighing, and transport of all waste materials in accordance with the Florida Department of Transportation Regulations, and U.S. Department of Transportation Regulations. The Owner shall use only transporters that are licensed and competent to haul these wastes.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01581 PROJECT SIGNS

PART 1 – GENERAL 1.0.1

SCOPE OF WORK

A. Project Signs

1. City's Responsibility: To supply, erect and remove signs.

2. Contractor Responsibility: To maintain signs and restore site.

PART 2 – PRODUCTS 2.0.1

PROJECT SIGNS

A. The City will supply signs for this Project. These signs will be produced, installed, and at the end of construction, removed by City's forces. During the construction period, the Contractor shall maintain the signs in good condition, satisfactory to the Engineer. Should the signs be defaced, damaged or destroyed, the Contractor shall be responsible for their repair or replacement to the satisfaction of the Engineer and no extra compensation will be allowed.

PART 3 – EXECUTION 3.0.1

MAINTENANCE

A. Maintain signs and supports and repair all damages to the satisfaction of the Engineer.

B. Restore site to original condition upon completion of Project.

END OF SECTION

01600 MATERIALS AND EQUIPMENT SHIPPING, HANDLING, STORAGE AND PROTECTION

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. This shall include both the City and Contractor supplied material and equipment.

B. The Contractor is to inform all Subcontractors, suppliers, and manufactures of the requirements herein specified and shall include expenses for the following services in his costs for compliance with the requirements hereinafter specified.

1.0.2. PREPARATION FOR SHIPMENT

A. When practical, equipment shall be factory-assembled. The equipment parts and assemblies that are shipped unassembled shall be furnished with assembly plan and instructions. The separate parts and assemblies shall be factory matchmarked or tagged in a manner to facilitate assembly. All assemblies are to be made by the Contractor at no additional cost to the City.

B. Machined and unpainted parts subject to damage by the elements shall be protected with an application of a strippable protective coating, or other approved protective method.

C. Equipment shall be packaged or crated in a manner that will provide protection from damage during shipping, handling, and storage.

D. The outside of the package or crate shall be adequately marked or tagged to indicate its contents by name and equipment number, if applicable; approximate weight; state any special precautions for handling; and indicate the recommended requirements for storage prior to installation.

1.0.3. PACKING AND DELIVERY OF SPARE PARTS AND SPECIAL TOOLS

A. Properly mark to identify the associated equipment by name, equipment, and part number. Parts shall be packaged in a manner for protection against damage from the elements during shipping, handling, and storage. Ship in boxes that are marked to indicate the contents. Delivery of spare parts and special tools shall be made prior to the time associated equipment is scheduled for the initial test run.

1.0.4. SHIPMENT

A. All equipment and material shall be shipped with freight and shipping paid FOB jobsite.

B. The Contractor shall request a 7-day advance Notice of Shipment from manufacturers, and, upon receipt of such notice, provide the Engineer with a copy of the current

delivery information concerning equipment items and material items of critical importance to the project schedule.

C. Schedule delivery to reduce long term on-site storage prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from the Engineer.

D. Coordinate delivery with installation to ensure minimum holding time for items that are hazardous, flammable, easily damaged or sensitive to deterioration.

1.0.5. RECEIVING

A. The Contractor shall unload and record the receipt of all equipment and materials at the jobsite.

B. All costs for receiving, inspection, handling, storage, insurance, inventory control, and equipment maintenance for both for both the Contractor-supplied and the Citysupplied materials and equipment shall be included in the prices bid and no extra compensation will be allowed.

1.0.6. INSPECTION

A. Immediately upon receipt of equipment and materials at the jobsite, the Contractor shall inspect for completeness and any evidence of damage during shipment. Should there appear to be any shortage or damage, the Engineer shall be immediately notified; and the Contractor shall be fully responsible for informing the manufacturers and the transportation company of the extent of the shortage or damage. If the item or items require replacing or supplying missing parts, the Contractor shall take the necessary measures to expedite the replacement or supply of the missing parts.

1.0.7. HANDLING

A. Equipment and materials received for installation on this project shall be handled in accordance with the manufacturer's recommendations, and in a manner that will prevent damage.

B. Pipes shall always be handled with great care to avoid damage. In loading and unloading, they shall be lifted with cranes or hoists or slid or rolled on skidways in such

a manner as to avoid shock. Under no circumstances shall this material be dropped or allowed to roll or slide against obstructions. No cables, lifting arms, hooks or other devices shall be inserted into the pipe or fitting. All lifting, pulling or pushing mechanisms shall be applied to the exterior of the pipe. Pipe and other material shall be distributed along the right-of-way in advance of installation only to the extent approved by the Engineer. Pipe shall be stored on blocking or timber. It shall not be stored on rocks, boulders, or other supports which in the opinion of the Engineer are unsuitable. Such materials shall be so placed as to keep obstruction to traffic to a minimum.

1.0.8. STORAGE AND PROTECTION

A. Equipment and materials shall be stored prior to installation as recommended by the manufacturer. Generally, materials such as pipe shall be stored off the ground in approved storage yards or along the line of the proposed pipeline as approved by the Engineer. Items subject to the damage by the elements, vandalism, or theft shall be stored in secure buildings.

B. Store and protect products in accordance with the manufacturer's instructions, with seals and labels intact and legible. Storage instructions shall be studied by the Contractor and he shall review them with the Engineer. Instructions shall be carefully followed and a written record of this kept by the Contractor. Arrange storage to permit access for inspection.

C. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

D. Cement and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All structural, miscellaneous and reinforcing steel shall be stored off the ground or otherwise to prevent accumulations of dirt or grease, and in a position to prevent accumulations of standing water and to minimize rusting. Beams shall be stored, the webs vertical. Precast concrete shall be handled and stored in a manner to prevent accumulations of dirt, standing water, staining, chipping or cracking. brick, block and similar masonry products shall be handled and stored in a manner to reduce breakage, cracking and spalling to a minimum.

E. All bolts, nuts, gaskets and other joint materials for use in pipelines shall be stored under cover.

F. Gaskets shall be stored in their original packing bags or containers, and care shall be exercised to keep them away from heat, light, oil gasoline or other petroleum products. Gaskets shall be kept clean at all times and not handled with greasy or dirty hands.

G. Plastic pipe and other elastomeric products shall be stored under cover to preclude damage by ultraviolet radiation even if the product has UV inhibitors in its compound.

1.0.9. INSURANCE

A. The Contractor's insurance shall adequately cover the value of materials delivered but not yet incorporated into the work. The Contractor and the City shall be named as coinsured insofar as their respective interests may appear. Proof of this coverage must be submitted to the Engineer at the time request for progress or partial payments.

1.0.10. INVENTORY CONTROL

A. Equipment and materials shall be stored in a manner to provide easy access for inspection and inventory control. The Contractor shall keep a running account of all materials in storage to facilitate inspection and to estimate progress payments for materials delivered but not installed in the work.

1.0.11. EQUIPMENT MAINTENANCE PRIOR TO THE CITYACCEPTANCE

A. Provide the required or manufacturer's recommended maintenance during storage, during the installation, and until such time as the City accepts the equipment for fulltime operation.

1.0.12. SALVABLE EQUIPMENT

A. Any salvable pipe, or other miscellaneous material or equipment removed during construction and not reused in the work shall be cleaned, hauled, and stored by the Contractor at his own expense, where directed by the Engineer, and shall remain the property of the City. All other material shall be disposed of by the Contractor at his own expense.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01700 PROJECT CLOSEOUT

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Work Included: This section outlines the procedure to be followed in closing all contracts.

1.0.2. RELATED SECTION

A. Section 01340 "Shop Drawings, Product Data, and Samples".

B. Section 01720 "Project Record Documents".

C. City of Opa-Locka General Covenants and Conditions.

1.0.3. FINAL INSPECTIONS

A. The City will not issue preliminary punch lists. After final cleaning and upon written notice from the Contractor that he has inspected the work and it is a 100% completed, the Engineer will make a preliminary inspection with the City and the Contractor present. Upon completion of this preliminary inspection, the Engineer will submit to the Contractor a written final punch list of any which this inspection reveals as defective or incomplete work.

B. Upon receiving written notice from the Engineer, the Contractor shall immediately undertake the work required to remedy the defects and complete the work to the satisfaction of the City.

C. Each item in the punch list shall have a time duration agreed upon by both parties which shall not exceed 10 calendar days. Punchlist items may be eliminated individually from the list when approved by the Engineer.

D. Should the Engineer find all work satisfactory at the time of the inspection, the Contractor will be allowed to make application for final payment in accordance with the provisions of the General Covenants and Conditions.

1. If the Contractor fails to complete any item of work within a time period equal to 100% of the agreed upon duration of time for all individual items, the Engineer will notify the Contractor in writing specifying the conditions pertaining thereto and

directing the Contractor to comply with his directive. If the Contractor has not corrected such condition within 5 days of such notice, it shall be sufficient grounds for the Engineer to order the subject items discontinued and have them completely remedied in a timely manner at the expense of the Contractor.

2. No final estimate shall be issued by the Engineer until the Engineer has assured himself that the punch list has been 100% finished and all other related documents are submitted.

1.0.4. FINAL SUBMITTALS

A. The Contractor shall submit all closeout documents required by the Contract Documents, including but not limited to the following.

1. Warranties and guarantees

2. Test reports, including but not limited to:

   a. Concrete test results certified by a licensed testing laboratory

3. Inspection and acceptance records

4. Operating and maintenance manuals

5. Project record documents

6. Permit closeout documentation

1.0.5. FINAL PAYMENT APPLICATION

A. Final payment application must include:

1. Final releases of liens from all subcontractors and suppliers

2. Final release from Contractor

3. Final consent of surety bond

4. The Contractor must obtain final Greenspace Management approval for installed landscaping

5. Upon receipt of Final Payment, the Contractor shall execute the Form of Final Receipt, if applicable

1.0.1. GUARANTEES, BONDS, AND AFFIDAVITS

A. No Contract will be finalized until all guarantees, bonds, certificates, licenses, roofing warranty, C.O. and affidavits required for work or equipment as specified are satisfactorily filed with the Engineer.
B. The Contractor shall comply with the Public Records Laws of the State of Florida.

1.0.2. ACCESSORY ITEMS

A. All Contractors furnishing and/or installing equipment and spare parts on this project shall provide to the City, upon acceptance of the equipment, all special accessories required to place each item of equipment in full operation.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01710 CLEANING

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This Section specifies the maintenance of the work site in a clean, orderly, hazard free condition.

1.0.2. QUALITY ASSURANCE

A. Conduct cleaning and disposal operations in accordance with local ordinances and anti-pollution laws. Rubbish, volatile wastes, and other construction wastes shall be neither burned nor buried on the work site, and shall not be disposed of into storm drains, sanitary drains, streams or other waterways.

B. Final cleaning shall be accomplished either by workmen experienced in cleaning operations or by professional cleaners.

PART 2 – PRODUCTS

1.0.1. ON SITE WASTE CONTAINERS

A. Provide on-site waste containers for collection of waste materials, debris and rubbish. See Section 01100 "Special Project Requirements", Subsection 1.0.4. regarding Safety Requirements for environmentally hazardous materials.

1.0.2. CLEANING MATERIALS

A. Cleaning materials shall be as recommended by the manufacturer of the surface to be cleaned.

PART 3 – EXECUTION 1.0.3.

SAFETY REQUIREMENT

A. Maintain work site in accordance with local ordinances and anti-pollution laws applicable to work site cleanliness and in a neat, orderly and hazard-free condition until final acceptance of the work. Catwalks, accessible underground structures, work site sidewalks and walkways adjacent to the work site shall be kept free from hazards caused by construction activities.

B. Store volatile wastes including rags in covered metal containers and remove from work site daily.

C. Prevent accumulations of wastes which create hazardous conditions.
D. Artificially ventilate spaces which are not naturally ventilated when volatile or noxious substances are present in those spaces.

1.0.4. CLEANING DURING CONSTRUCTION

A. The Contractor shall at all times during the execution of this Contract keep the work site free and clear of all rubbish and debris. As soon as the work is completed, the accumulated rubbish or surplus materials shall be promptly removed. The Contractor shall also restore in an acceptable manner all property, both public and private, which has been displaced or damaged during the prosecution of the work and shall leave the site and vicinity unobstructed and in a neat and presentable condition.

B. In the event of delay exceeding two (2) days after written notice is given to the Contractor by the Engineer to remove such rubbish or materials or to restore displaced or damaged property, the Engineer may employ such labor and equipment as he may deem necessary for the purpose, and the cost of such work, together with the cost of supervision, shall be charged to the Contractor and shall be deducted from any monies due him. The Project shall not be considered as having been completed until all rubbish and surplus materials have been removed and disposed of properly.

C. Perform cleaning every workday for duration of the work. Structures, grounds, and areas of the work site, access roads and adjacent public and private properties shall be maintained free from accumulations of waste materials and rubbish caused by construction operations on the work site. Place waste materials and rubbish in on site containers or as otherwise approved. Unneeded construction equipment shall be removed and all damaged repaired so that the public and property owners will be inconvenienced as little as possible.

D. Remove or secure loose material on open decks and on other exposed surfaces at end of each day's work or more often to maintain work site in hazard-free condition.

E. Prevent dislodgement of materials due to wind and other forces. Wet down dry materials and rubbish to lay dust and prevent blowing dust. Cover or wet excavated material leaving and arriving at the site to prevent blowing dust. Clean the public access roads to the site of any material falling from the haul trucks.

F. Empty on-site waste containers whenever necessary so that trash overflow does not occur. Legally dispose of contents at either public or private dumping areas.

G. Control the handling of materials, debris and rubbish; do not drop or throw from heights.

H. Immediately remove spillages of construction-related materials from hauling routes.

1.0.5. FINAL CLEANING

A. In addition to the cleaning performed above, in preparation for final inspection, remove grease, dust, dirt, rust stain from surfaces. Remove labels, fingerprints and other foreign materials from exposed exterior finished surfaces. Flush down all valve boxes, and areas leaving such surfaces clean of all sand, etc.

B. In preparation for final acceptance or occupancy, conduct final inspection and cleaning of exposed exterior surfaces, and of concealed spaces.

C. Maintain cleaning operations until project has been finally accepted.

END OF SECTION

01711 FINAL ACCEPTANCE

PART 1 – GENERAL

1.0.1. FINAL CLEANUP

A. At the completion of work and immediately prior to final inspection, cleaning of the entire project shall be accomplished according to the following provisions:

1. All temporary utility drops, fencing, and water supply outlets shall be removed.

2. All plant gate identification signs, barricades, tools, rubbish collection receptacles and other such items shall be removed by the Contractor.

3. All remaining earthen stockpiles of excess excavated material shall be graded to provide gentle slopes to prevent erosion as directed by the Engineer.

1.0.2. FINAL INSPECTION

A. Following final cleanup, the Contractor shall request an inspection by the Engineer, and Engineer of Record. If the Engineer accepts the work as being complete, then Final Acceptance shall be given to the Contractor in accordance with Contract.

1.0.3. FINAL ACCEPTANCE

A. Following successful final inspection, the Engineer shall approve the work as being complete and provide final acceptance of the work in accordance with the Contract.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01720 PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor is responsible for maintaining one record copy of:

1. Record Drawings. Record Drawings as used herein shall mean a drawing that reflects construction or design changes.

2. Record Specifications.

3. Addenda.

4. Change Orders and other modifications of the Contract.

5. Engineer's written orders or instructions.

6. Approved Shop Drawings (including product data and samples).

7. Field test records.

8. Construction photographs.

9. As-built dimensions and elevations as recorded on a daily basis by the Contractor's Professional Surveyor and Mapper (PSM) licensed to practice in the State of Florida.

10. Field Book. Survey Field notes taken by the PSM's survey crew (copy provided to the Engineer on a monthly basis)

11. The records listed above are always to be made available for the Engineer's review for all projects.

B. Vertical Datum: Nationwide, surveys and as-builts are in the process of conversion to NAVD 88 from the NGVD 1929. The City will accept NAVD 88 datum with a conversion factor on each page. The Florida Department of Transportation is using the NAVD 88 datum. Projects within FDOT roadway limits shall either use NAVD 88 datum or provide a conversion factor on each page if the NGVD 1929 datum is used. For projects using City of Miami datum provide a conversion factor on each page to the NAVD 88 datum.

1.0.2. MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Maintain documents in a clean dry, legible, condition and in good order. Do not use record documents for construction purposes.

1.0.3. REQUIRED MEASUREMENTS

A. Set-up and Verification: The Contractor's PSM is required to recover the design baseline and verify the elevations and coordinates on a regular basis as needed.

B. The Contractor is required to have a level instrument setup next to the construction site in order to control the vertical alignment of the pipe installation prior to trench backfilling. The level shall be setup daily for use by the surveyor, Contractor's foreman and City Engineer/Inspector. Any underground construction work that does not have a level properly setup will be stopped by the City Engineer/Inspector.

C. The Contractor is required to have the PSM's survey crew record the field information on a daily basis when there is underground pipe installation. The survey crew shall be on-site as needed to record and verify the information before it is covered. Any underground construction work that does not have the information recorded by a survey crew will be stopped by the City Engineer/Inspector. The Engineer/Inspector has the authority to order re-excavation of work that was covered without accurate survey measurements.

D. Field Book Information: The PSM is required to have his crews make daily visits to the Project site during underground pipe installation work to perform field measurements of the Contractor's daily installations. This information shall be recorded in field books. Copies of the field notes are required to be provided to the Construction Manager on a monthly basis. The PSM's field notes shall be submitted to the City along with partial as-built plans (signed and sealed) on a monthly basis as a condition of payment.

1.0.4. RECORDS

A. During the life of the Contract the Contractor shall retain the services of a PSM who shall maintain daily records of the installation, including all deviations from Plans and Specifications and for the purposes of preparing and submitting to the City an asbuilt/record survey in compliance with:

1. Florida Statutes Chapter 472.027.

2. Florida Administrative Code Chapter 5J-17.050, 5J-17.051 and 5J-17.052.

3. As further required by these Contract Documents.

B. Measure and Record all information for all projects concurrently with constructions progress.

1. The services of the PSM for the Project shall be retained by the Contractor prior to the issuance of the "Notice to Proceed." A letter from the PSM shall be provided at the Preconstruction Meeting indicating that the Contractor has secured his services to perform all survey work for the duration of the project and prepare final as-builts plans.

C. Redline Drawings:

1. The Contractor shall maintain full size (22-inches by 34-inches) redline drawings to reflect the "record" items of work as the work progresses.

2. At a minimum, the redline drawings shall be reviewed on the 20th working day of every third month, or more often, as deemed necessary by Consultant, after the month in which the final Notice-to Proceed is given as well as on completion of Work. Failure to maintain the redline drawings up-to-date shall be grounds for withholding monthly progress payments until such time as the redline drawings are brought up-to-date.

3. Redline drawings shall be accessible to the City or designee at all times during construction period.

4. The cost of maintaining record changes, and preparation of the as-built record drawings shall be included in the unit prices bid for the affected items.

D. Label each document "PROJECT RECORD" in neat large printed letters.

1. Do not conceal any work until as-built information is recorded by the Contractor's surveyor and, if so required, by the City surveyor.

2. All locations for future connections or tie-ins shall be left unburied and uncovered until the Contractor's PSM measures and records the as-built information.

   a. All as-built and inspector information is to be made available to the Engineer daily for inclusion in the City records.

3. Restrained pipe, end line valves, thrust blocks shall be left uncovered for the last complete length. In line valves and tees shall be left exposed for one length on both sides plus the face end. Measure and record the elevation, horizontal and vertical alignment, and inclination for these items.

4. For all projects, the Contractor's PSM shall maintain exact and extensive records of any deviations from the plans or specifications. These records shall be satisfactory to the Engineer, who's decision shall be final, and enough to allow the production of accurate as-built plans which correctly and completely portray the work as constructed.

5. For all projects, the Contractor's PSM shall record data as follows during the entirety of construction:

   a. For facility (e.g. a water or sewage plant, pumping station, or similar site if so, designated by City) projects, record as-built dimensions and elevations every twenty-five feet or portion thereof along the pipeline and at every abrupt change in direction of the new line.

   b. For pipeline projects, constructed in the public right-of-way dimensions and elevations every one-hundred feet or portion thereof along the pipeline and at every horizontal and vertical change in direction.

   c. In all cases record locations and elevations for each valve, fitting, service line, fire hydrant, water sampling point, utility poles adjacent to the proposed line, overhead wires crossing the ditch line (approximate height above grade) and other appurtenances along the pipeline.

   d. The identity, dimensions, location and elevation of any existing utility crossing the proposed line and so immediately adjacent to the new line as to be exposed by the excavation shall also be recorded. Locate, excavate expose and record the same data for any utility shown in the plans whose proximity to the proposed pipeline could affect the certification requirements of the new installation. Note that in instances of a very wide ditch due to ground conditions the recording of data for adjacent, paralleling, utilities shall only be required for lines which come within three (3) feet of the outside of the pipe being installed unless otherwise ordered by the Engineer who's decision shall be final.

   e. Without exception, for all thrust blocks, the top elevation, outer dimensions, thickness of the block, length and location of any sheet piling, if used, shall be recorded by the Contractor's PSM.

   f. Specific locations and elevation of equipment, the buildings and miscellaneous items installed inside them shall be recorded as applicable and as required by the Engineer.

   g. Without exception, where the substitution of another piece of equipment for that shown on the plans has been allowed, the footprint, clearance and elevation dimensions shall be recorded by the Contractor's PSM and these changes shall be accurately and thoroughly portrayed on the as-built plans.

   h. The Contractor's Licensed PSM shall prepare from the field data, as-built record drawings showing correctly, completely and accurately the installation, embracing all changes and deviations made during construction, including all construction variances, to reflect the work as it was constructed.

   i. Record Drawings shall be prepared as specified hereinafter.

1) Record Drawings shall be prepared as specified herein.

2) Record Drawings and five (5) copies shall be signed and sealed by the PSM and shall be submitted to the City for the Engineer's review within ten (10) calendar days following the completion date of successful pressure testing of all mains and appurtenances under this Contract.

j. If the Engineer determines that the drawings are not acceptable, they will be returned to the Contractor with a cover letter noting the deficiencies and/or reasons for the disapproval. Contractor shall have ten (10) calendar days to correct all exceptions taken by the Engineer and resubmit as-built record drawings to the Engineer for final acceptance.

1.0.5. DRAWINGS

A. During the life of the Contract, maintain records of all deviations from the plans and specifications and prepare therefrom As-Built Record Drawings showing correctly and accurately all changes and deviations made during construction to reflect the work as it was actually constructed. It is the responsibility of the Contractor to check the AsBuilt Record Drawings for errors and omissions prior to submittal to the City and certify in writing that the As-Built Record Drawings are correct and accurate, including the actual location of all piping including building exposed and internal piping, electrical/signal conduits in or below the concrete floor, Indicate the size, depth and voltage in each conduit.

B. Legibly Mark to Record Actual Construction: All data as previously specified for all installations by the Contractor's . For on-site structures and facilities work the Contractor's Florida Registered Land Surveyor shall record:

1. Depths of various elements of foundation in relation to datum plane.

2. All exposed and underground piping and ductwork with elevations and dimensions and locations of valves, pull boxes, etc. Changes in location, Horizontal and vertical locations of underground utilities and appurtenances, measured from permanent reference points, plant survey grids, property lines and similar.

3. Location of internal utilities and appurtenance concealed in the construction shall be referenced to visible and accessible features of the structure. Air conditioning ducts with locations of dampers, access doors, fans and other items needing periodic maintenance.

4. Field changes in dimensions, locations and details.

5. Changes made by Engineer's written instructions or by Change Order.

6. Details not on original plans.

7. Equipment and piping relocations.

8. Major architectural and structural changes in structures, including tanks.

9. Architectural schedule changes according to Contractor's record and shop drawings.

10. Record drawings shall be prepared as specified hereinafter.

C. Specifications and Addenda: Legibly mark each section to record the following:

1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment installed.

2. Changes made by Engineer's written instructions or by Change Order.

D. Approved Shop Drawings: Provide record copies for system diagrams and drawings together with each element of process equipment, piping, electrical system and instrumentation system.

1.0.6. SUBMITTALS

A. Accompany submittal with transmittal letter in duplicate, containing:

1. Date

2. Project title and number

3. Contractor's name, address and phone number

4. Title and number of each Record Document

5. Contractor signature or of its authorized representative.

B. Record Drawings with five blue line copies which have been signed and sealed by the surveyor shall be submitted to the City for the Engineer's review. Drawings shall conform to recognized standards of drafting and the minimum technical standards as set forth by the Board of Professional Surveyors and Mappers, shall be neat, legible and on 24-inch by 36-inch Mylar. These materials shall be submitted to the City for the Engineer's review as a prerequisite for payment during the course of construction as previously specified and final, complete sets of documents within ten calendar days following the completion date of successful testing of all mains, equipment and

appurtenances under this Contract. Final payment will not be made until the set of asbuilt record drawings and five sets of blue-line prints have been approved and accepted by the Engineer.

C. In cases where a portion of a pipeline system or parts of a process system are put into service, the above conditions shall apply for the in-service portion and monthly payments shall be withheld until the as-built drawings are accepted by the Engineer.

D. As-Built Record Drawings, as prepared by the Contractor's Florida Registered Land Surveyor and submitted by the Contractor, shall comply with following criteria and standards, and as specified in Section 01725 "As-built Drawings":

1. Title block must show the Contract or Project Title (as applicable); Contract number; City project number (if applicable); Contractor's name; Engineer of Record's name; Surveyor's name and address; date; location; and where appropriate to the work, size and type (i.e. water main, sanitary gravity main, sanitary force main) of main.

   a. Baselines or centerlines must be tied to section corners, monument line and right-of-way lines.

   b. Pipeline must be tied to baseline or centerline with stations and offsets.

   c. Baselines or centerlines must show bearings or deflection angles, or delta, radius, chord and arc length for curves.

   d. Show all horizontal curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

   e. Stationing must be the same as shown on construction drawings and must be tied to Section corners, centerline intersections and all other pertinent control points within the project. All such pertinent points shall have their stationing shown and where there is dual stationing for a point, both stations shall be called out.

   f. Identify all streets by name or number and show stationing at all intersecting streets.

   g. Refer to vertical datum plane and identify the location, elevation and source supplying the benchmark used.

   h. Tie easement lines to survey baseline or platted centerline and rights-of-way.

   i. Show horizontal and vertical locations of all pipes, deflections, or any significant change of direction.

j. Elevations of natural ground or pavement over the pipeline must be shown at each position where the pipe elevation is shown and at intervening high and low points.

k. Show all invert and bottom elevations of culvert piping. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the culvert being constructed.

l. Locations and elevations together with diameter and material of all pipes.

m. Coordinate values used inside plants shall be the local, City established coordinate systems referenced to the property boundary.

E. Update of Construction Documents:

1. All "proposed" information shall be removed from as-builts, leaving only "as-built" information reflected in drawing.

2. Upon completion of the Work, the Contractor shall furnish the Consultant the asbuilt record drawings. Pay request quantities must match as-builts record drawings. The completed as-built record drawings shall be delivered to the Consultant at least 48 hours prior to final inspection of the work. The final inspection will not be conducted unless the as-built record drawings are in the possession of the Consultant.

3. The City reserves the right to have a Registered PSM perform spot checks of asbuilt information provided by the Contractor. The City shall pay the costs of such survey work when the work is performed by a City of Opa-Locka Contractor. Should any spot checks indicate that any portion of the installation does not comply with the Contract Documents, a recheck shall be performed by another (or third) Registered PSM or agreed to by both the City and Contractor at the Contractor's expense. If the recheck confirms the first check, that portion of the work shall be removed and replaced or modified at no additional cost to the City until satisfactory compliance is attained.

F. Certification: The Contractor shall certify on as-built record drawings all other actual constructed details and information as may be required by the City including but not limited to:

1. Pipeline must be identified by type of pipe material and manufacturer.

2. Types and sizes of sheeting and piling together with measured and complete; location, dimensional and elevation data on any pile caps, tie backs, anchors, whalers or other appurtenant structures left in place.

26.0 Digital Records: The City reserves the right to require submittal of as-built drawings in AutoCAD format and in PDF format. The AutoCAD file shall be compatible with the City's system and capable of being uploaded without external reference files. Graphical information contained on electronic media shall be the same as provided on plan sheets. Digital Records shall be delivered to the office of the City Engineer, Engineering Division, Opa-Locka Public Works Department at 12950 NW 42 Ave in OpaLocka, FL 33054.

G. . A letter of transmittal shall be provided, containing a list of all files and data being provided.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION 01725 AS-BUILT DRAWINGS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This section shall serve to set out guidelines for as-built drawings submitted to City of Opa-Locka.

B. To ensure that as-built drawings may serve their intended purposes now and in the future, they should be prepared with consideration for quality. The City of Opa-Locka Public Works Department will consider the following elements during as-built during review to ensure the quality of the as-built drawings.

C. The Contractor is required to have a survey crew record the field information on as necessary when there is underground pipe installation. The Florida Licensed Professional Surveyor and Mapper shall be responsible for providing measurements accurate to the standard of practice established in Chapter 5J-17.050 to 5J-17.052 of the Florida Administrative Code, pursuant to Section 427.027, Florida Statutes. The approved final record as-built shall be used as part of the City of Opa-Locka's GIS and Record System.

D. The Contractor's PSM shall maintain exact and extensive records of any deviations from the design plan set.

E. As-built drawings shall be prepared in a professional manner consistent with common engineering standards for layout, lettering, and line-work.

F. As-built information shall be portrayed in a manner that is readily understandable by someone not familiar with the specific job.

G. Preparer shall endeavor to present as-built information clearly without "cluttering" the drawing.

H. As-built drawings shall include all disciplines in the Bid Set drawings.

1.0.2. CRITERIA FOR AS-BUILTS

A. Horizontal: All horizontal control and locations shall be tied to the Florida State Plane Coordinate System, East Zone (NAD 83/2011).

B. Vertical Datum: All vertical control and elevations shall be referenced to North American Vertical Datum of 1988 (NAVD 1988).

1.0.3. AS-BUILT REVIEW PROCESS

A. SUBMITTAL PACKAGE

The following shall be submitted as one package in order to be accepted for initial review by the Inspections Unit.

1. Initial submittal (prior to performing field testing) shall include the following: 1 set of signed and sealed as-built (DWFX file), signed and sealed field book information, DWFX file of the as-built and the City Minimum Requirements As-built Plan Submittal.

2. Final submittal shall consist of corrected As-Built Documents in digital format (AutoCAD and DWFX files) and the following sets of signed and sealed as-builts sets:

   Five (5) sets.
   Signed and Sealed Copy of Field Book Information.
   As-builts signed and sealed by the Florida Licensed Professional Surveyor and Mapper and/or Engineer of Record must comply with format requirements.

B. CITY PROCESSING.

1. The City will require Ten (10) business days to perform the as-built review.

2. As-builts will be initially checked by the responsible Field Inspector to verify that they are an accurate representation of the work as installed and that the job as shown is complete and in accordance with the permitted plans.

3. Following the Field Inspector's review, as-builts will be reviewed in depth by the AsBuilt Reviewer to ensure compliance with these standards. The Reviewer will also check the complete package which includes the Bill of Materials.

C. PUNCH LIST

1. Punch List items may be generated from the City initial review. Successive reviews are solely for the purpose of ensuring that original punch list items are completely and correctly done to obtain a final As-built acceptable to the City.

2. Successive punch list items may only be added to correct a problem resulting from submitter's efforts to comply with the original punch list. No new original punch list item(s) may be added. Submitter shall be required to make these successive changes.

3. In the case of an oversight on the part of the As-built Reviewer, punch list items may be added to the list or requested of the submitter after the valid time for such items. The City requires that all corrections be made as a condition of accepting the final as-builts.

4. Marking of the drawings shall be kept current and shall be done at the time the material and equipment are installed. Annotations to the Contract Documents shall be made with an erasable colored pencil conforming to the following color code:

Additions - Red
Deletions - Green
Comments - Blue Dimensions
- Graphite*

*Legibly mark to record actual depths, horizontal and vertical location of all above and below grade structures, underground pipes, valves, raceways, cables, and appurtenances referenced to permanent surface improvements.

1.0.4. AS-BUILTS SUBMITTAL REQUIREMENTS

A. GENERAL REQUIREMENTS

1. Prior to final acceptance, two (2) copies of as-built drawings certified by a Florida Registered Land Surveyor shall be provided to the City for approval, acceptance and certification by the "Engineer of Record", together with a copy of digital media producing such As-Builts.

2. At minimum, the As-Built must show Station numbers and horizontal offsets from the Base Line and Right-of-Way lines on a Plan scaled 1"=20 ft. for all fittings, valves and changes in horizontal alignment, and a profile with a vertical scale of not less than 1" = 2 ft. with elevations at all horizontal and vertical changes in alignments and grade profile elevations at approximately 50 ft.

3. As-Built plans and profiles must also show all abandoned pipes and plugs that were modified within the project limits and actual elevation/description of all other utilities crossing or encountered in the vicinity of the new water mains. The paper size of the drawings shall be 22"X 34".

4. Any deviations from the design plans must be approved by the City.

B. QUALITY OF AS-BUILTS

To ensure that as-builts may serve their intended purposes now and in the future, they should be prepared with consideration for quality. The As-built Reviewer will consider the following elements to ensure the quality of as-builts.

1. Accuracy: The Contractor is required to have a survey crew record the field information on as necessary when there is underground pipe installation. The Florida Licensed Professional Surveyor and Mapper shall be responsible for providing measurements accurate to the standard of practice of the Florida Administrative Code. The approved final record as-built shall be used as part of the City GIS and Record System.

2. Field Changes: The Contractor's PSM shall maintain exact and extensive records of any deviations from the design plan set.

3. Appearance: As-builts shall be prepared in a professional manner consistent with common engineering standards for layout, lettering and line-work.

4. "Understandability": As-built information shall be portrayed in a manner that is readily understandable by someone not familiar with the specific job.

5. Clarity: Preparer shall endeavor to present as-built information clearly without "cluttering" the drawing.

1.0.5. AS-BUILT CONTENT REQUIREMENTS – ALL DRAWINGS

A. All drawings submitted to the City of Opa-Locka Public Works Department shall include at a minimum the following, where applicable.

1. Centerlines, right-of-way lines, right-of-way dimensions, street widths and names, with matching plat, if applicable, subdivision name, phaseline, and number. (Phasing to be nearest valve and manhole in limits of phase area).

2. Baselines, monuments, monument lines, lot lines, parcel lines.

3. All involved lots and blocks shown and correctly designated (to match plat).

4. All control lines identified (i.e., centerline, section line, etc.). Identify all streets by name or number and show stationing at all intersecting streets.

5. Baseline shall be tied to centerlines, boundary lines, section corners, or to monument lines or to right-of-way lines. Baselines must show bearings or deflection angles, or delta, radius, chord, and arc length for curves.

6. Pipeline installation shall be tied to a baseline that easily identified on the existing or proposed right-of-way. Baseline shall not be on top of the main except for gravity sewers installed on centerlines.

7. Show all existing water, sewer and/or stormwater mains as a broken line (i.e., dashed). Show proposed utility as dark solid line. Also, identify respective utility pipe, size, and material type. Existing or proposed mains 20-inches in diameter and greater, shall be shown as two lines (i.e., double line) of the line type as stated.

8. Show all horizontal and vertical curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

9. Easements:

    a. Easements type and size shall be clearly shown with size and tied to centerline. The easements shall be separate for water, sewer, force main, and pump stations.

    b. Existing Official Record Book (ORB) or other record information must be shown.

    c. Easement lines shall be tied to the centerline of the main.

10. Separate profile for each segment and utility type (water, sanitary sewer, stormwater, etc.).

11. Every utility (water, sewer, sewer laterals, water services, gas, electric, stormwater, telecommunication, duct banks, etc.) encountered and/or crossing drainage, water, or sanitary sewer facilities (whether it is a conflict or has sufficient clearances) shall be located, both horizontally and vertically. The clearance between the facilities

horizontal and vertical, shall be noted. For instance, if a 2inch gas main crosses over the top of a 6-inch potable water main, the bottom elevation of the gas main shall be noted and the top of the water main shall be noted. The difference between the two facilities will be the clearance between the two facilities. Parallel mains shall note the clearance between the outside of the mains. It shall be the Contractor's responsibility to note these crossings on a daily basis and ensure that this information is reflected on the As-Built Drawing plan set. Crossings will not require state plane coordinates.

12. All utilities shall be stationed and all facilities labeled. Drawings shall show stations for all services. Lengths and distances for service runs shall also be given.

13. Clearly show and label what is new and what is existing at the tie-in points.

14. Show all outlets, stub-outs, sewer lateral, water service and any other relevant information. Identify the size, material, length, direction, and elevation (top of pipe for water, sewer, and stormwater and force mains, invert gravity sewer and stormwater mains).

15. Elevations of natural ground or pavement over pipelines shall be shown at each position where the pipe elevation is shown at least every 100 feet.

16. Manhole rim and valve box manhole rim elevations shall be shown.

17. Show all invert and bottom elevations in manholes and valve vaults or boxes. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the pipeline being constructed.

18. Locations, elevations, and size of all casings shall be shown.

19. Locations and top and bottom elevation of all sheeting, including sheeting left in place, shall be shown.

20. Provide State Plane Coordinate values for all visible features such as valves, manholes, maintenance access structures, fire hydrants, water meters, cleanouts, and backflow preventers. Also provide State Plane Coordinate values for existing valves and manholes at points of connection or closest to the point of connection and the point of connection itself.

21. Lines that are abandoned in place shall be located during construction and clearly identified (dashed and bold line type) on the drawings to include cut and plug locations and pipe material.

1.0.6. AS-BUILT CONTENT REQUIREMENTS – PAVING, GRADING, AND DRAINAGE DRAWINGS

A. Paving, grading, and drainage drawings shall include at a minimum the following, where applicable.

1. All existing and proposed utilities in the public right-of-way shall be shown on the paving, grading, and drainage plans. All utilities shall be identified and located by dimension, horizontally and by elevation, and their materials of construction shall be noted to the extent determinable without excavation.

2. Cross-section(s) and/or typical section(s) of proposed road and drainage construction, shall show dimensions, materials, and purposes of all existing (to remain) facilities as well as all proposed facilities within the right-of-way.

3. Pavement marking and signing drawings shall include sign locations.

B. All rock elevations for parking lot, roadways, and swale areas shall include at a minimum the following.

1. Rock elevations at all high and low points, and at enough intermediate points to confirm slope consistency and every 50 feet for roadways.

2. Rock elevations shall be taken at all locations where there is a finish grade elevation shown on the design plans.

3. All catch basin and manhole rim elevations shall be shown.

4. Elevations around medians will also be required.

5. Elevations shall be taken on all paved and unpaved swales prior to placement of asphalt and/or topsoil/sod, at enough intermediate points to confirm slope consistency and conformance to the plan details.

C. Retention area elevations shall be taken at the bottom of the retention area and at the top of bank. If there are contours indicated on the design plans, then they shall be asbuilt as well.

1.0.7. AS-BUILT SURVEY

A. An as-built survey will be required upon completion of all construction projects that lay within City-owned properties, including, but not limited to, City rights-of-way, easements, parcels, and submerged lands, etc. All improvements, including but not limited to, landscaping will be required.

B. As-built surveys shall be prepared in accordance with FAC Chapter 5J-17.051 and all applicable Standards of Practice.

C. When performing as-built surveys, the surveyor and mapper shall obtain field measurements of vertical or horizontal dimensions of constructed improvements so that the constructed facility can be delineated in such a way that the location of the construction may be compared with the construction plans.

D. As-built survey maps shall clearly show by symbols, notations, or delineations, those constructed improvements located by the survey.

E. The vertical and horizontal accuracy of the measurements made shall be such that it may be determined whether the improvements were constructed consistent with planned locations.

F. The Surveyor shall be responsible for the location, establishing or replacement of Vertical and Horizontal Survey Control Points.

G. Complete topographic and boundary survey for the project shall be signed and sealed by the Florida Licensed Professional Surveyor and Mapper as part of the as-built plans. All information required of a boundary survey shall be contained on the as-built plans to include the legal description of the site, easements and rights-of-way abutting the site and location of all surface facilities recorded by a PSM. All utilities within the property shall be properly shown, along with their associated elevation and clearance.

1.0.8. CERTIFICATION

A. All as-built drawings are to be certified to the City of Opa-Locka Public Works Department and all sheets are to be signed and sealed as previously outlined.

B. As-builts shall include a signed, sealed, and dated certification statement by the responsible Florida Licensed Professional Surveyor and Mapper that all measurements were recorded under his direction and are accurate.

C. Any civil drawings that are not surveyed shall also be included in the set and shall be signed and sealed by the Engineer of Record.

D. As-builts that contain electrical, mechanical, or structural work shall also be signed and sealed by the Engineer of Record to indicate that the work was constructed as designed.

E. It is the responsibility of the Contractor to check the as-builts for errors and omissions prior to submittal to the City and certify in writing that the as-builts are correct and accurate, including the actual location of all piping including building exposed and internal piping, electrical/signal conduits in or below the concrete floor, indicate the size, depth, and voltage in each conduit.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01730 OPERATING AND MAINTENANCE INSTRUCTIONS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Prepare Operating and Maintenance (O & M) Manual covering all equipment and systems provided under this project.

B. Instruct the City's personnel in the operation of equipment and maintenance provided under this project.

C. This Section covers the services of the manufacturer's representatives and special coordinating services required of the Contractor that shall apply during construction, facilities startup, and training of the City's personnel for facilities operation.

D. The Contractor shall inform all Subcontractors and manufacturers of the requirements herein and include the following services in his costs for the work. Where a minimum amount of time is stated in the Technical Specifications for manufacturer's services, any additional time required to perform the specified services shall be at no additional cost to the City.

1.0.2. SUBMITTALS

A. Not later than 30 days after the start of Construction, submit for review and approval by the Engineer two copies of a preliminary draft of the O&M manual, showing the proposed format and an outline of the contents.

B. Throughout construction, prepare O&M sections for equipment and systems when such equipment and systems, and shop drawings and technical data therefor, are approved. Within 30 days following receipt of the Engineer's approval of the final shop drawing submittal, submit, in duplicate, draft of complete O&M Manual for review and approval of Engineer.

C. Within 30 days after receipt of Engineer's review comments, make required revisions and submit in final form two copies of the O & M Manual for final approval.

D. The Contractor shall inform all Subcontractors and manufacturers of the requirements herein and include the following services in his costs for the work. Where a minimum amount of time is stated in the Technical Specifications for manufacturer's services, any additional time required to perform the specified services shall be at no additional cost to the City.

1.0.3. FORM, FORMAT AND SUBMITTALS CONTENTS

A. Operating and maintenance manuals will be used for use by the City personnel in the operation and maintenance of the various systems.

B. The City shall be furnished with one set of any special tools required for servicing for each type of equipment actually furnished. These tools shall be provided to the Pump Station Maintenance Division.

C. Prepare data in the form of an instructional manual for use by the City personnel.

D. Format:

1. Size: 8½ in. x 11 in.

2. Paper: 20-pound minimum, white, for typed pages.

3. Text: Manufacturer's printed data or neatly typewritten.

4. Drawings:

   a. Provide reinforced punched binder tab, bind in with text.

   b. Fold larger drawings to the size of the text paper.

5. Provide fly-leaf for each separate product, or each piece of operating equipment.

   a. Provide typed description of product, and major component parts of equipment.

   b. Provide indexed tabs.

6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:

   a. Title of Project.

   b. Identify of separate structure as applicable.

   c. Identity of general subject matter covered in the manual.

E. Binders

1. Commercial quality three-ring binders with durable and cleanable plastic covers.

2. Maximum ring size: As required (Minimum 1½-inches).

F. Content of Manual

1. Neatly typewritten table of contents, arranged in a systematic order.

    a. Contractor, name of responsible principal, address and telephone number.

    b. A list of each product required to be included, indexed to the content of the volume.

    c. List, with each product, the name, address and telephone number of:

        1) Subcontractor or installer.

        2) Maintenance Contractor, as appropriate.

        3) Identify the area of responsibility of each.

        4) Local source of supply for parts and replacement.

        5) Identify each product by product name and other identifying symbols as set forth in Contract Documents.

G. Product Data:

1. Include only those sheets which are pertinent to the specific product.

2. Annotate each sheet to:

    a. Clearly identify the specific product or part Installed.

    b. Clearly identify the data applicable in the installation.

    c. Delete references to inapplicable information.

H. Drawings:

1. Supplement product data with drawings as necessary to clearly illustrate:

    a. Relations of component part of equipment and system.

    b. Control wiring, schematic wiring, and flow diagram.

2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.

3. Do not use Project Record Documents as maintenance drawings. I. Written text, as required to supplement product data for the particular installation:

1. Organize in a consistent format under separate headings for different procedures.

2. Provide a logical sequence of instructions for each procedure.

J. Copy of each warranty, bond and service contract issued.

1. Provide information sheet for City's personnel, give:

a. Proper procedures in the event of failure.

b. Instances which might affect the validity of warranties or bonds.

1.0.4. MANUAL FOR EQUIPMENT AND SYSTEMS

A. Content, for each unit of equipment and system, as appropriate:

1. Description of unit and component parts.

a. Function, normal operating characteristics, and limiting conditions.

b. Performance curves, engineering data and tests.

c. Complete nomenclature and commercial number of all replaceable parts.

2. Operating Procedures:

a. Start-up, break-in, routine and normal operating instructions.

b. Regulation, control, stopping, shut-down, and emergency instructions.

c. Special operating instructions.

3. Maintenance Procedures:

a. Routine operations.

b. Guide to "trouble shooting".

c. Disassembly, repair, and reassembly.

d. Alignment, adjusting, and checking.

4. Servicing and lubrication schedule:

a. List of lubricants required.

5. Manufacturer's printed operating and maintenance instructions.

6. Description of sequence of operation by control manufacturer.

7. Original manufacturer's parts list, illustration, as drawings and diagrams required for maintenance.

a. Predicted life of parts subject to wear.

b. Items recommended to be stocked as spare parts.

8. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.

9. Other data as required under pertinent sections of specifications.

B. Content, for each electric and electronic system, as appropriate:

1. Description of system and component parts

a. Function, normal operating characteristics, and limiting conditions.

b. Performance curves, engineering data and test.

2. Switchgear, transformers, and motor control centers.

a. Coordination summary.

b. Relay settings.

c. High voltage switch instructions.

d. High voltage cable termination and splice instructions.

3. Operating procedures:

a. Routine and normal operating instructions.

b. Special operating instructions.

4. Maintenance procedures:

a. Routine operations.

b. Guide to "trouble-shooting".

c. Disassembly, repair and reassembly.

d. Adjust and checking.

C. Prepare and include additional data when the need for such data becomes apparent during instruction of City's personnel.

D. Additional requirements for operating and maintenance data: The respective sections of Specification.

1.0.5. SUBMITTAL OF MANUALS

A. Two draft copies of the complete operating and maintenance manual shall be submitted for review by the Engineer within 30 calendar days after approval of all shop drawings. One copy will be return to the Contractor within 30 days after receipt by the Engineer.

1.0.6. POSTED OPERATING INSTRUCTIONS

A. General: Operating instructions and diagrams shall be prepared for posting near the equipment. Posted operating instructions shall be photographic or equal non-fading reproductions framed under glass encased in non-discoloring plastic and shall be mounted in location directed. Copies of the posted operating instructions shall also use with the operating and maintenance manuals as a basis in training employees in the operation and maintenance of systems and related equipment installed.

B. Contents: Posted operating instructions shall consist of simplified, consolidated equipment, control and power diagrams graphically representing the entire system and actual equipment installed, including concise written instructions on how to start and stop systems, what settings and conditions are to be observed and what control adjustments are to be made or maintained by the operation.

1.0.7. MANUFACTURES'S NAMEPLATES

A. Each major component of equipment to have manufacturer's name, address, model number and rating on a plate securely affixed in a conspicuous place. Nameplate of a distributing agent will not be acceptable in lieu of manufacturer's nameplate.

B. Nameplate shall be die-stamped, engraved, or etched to guarantee long term legibility.

1.0.8. GUARANTY/WARRANTY

A. The Contractor shall guarantee that all new equipment has the capacity specified and that it will operate without excess noise or vibration.

B. Contractor shall furnish a written guarantee covering all workmanship and materials for a period of one (1) year, from the date of acceptance. This shall include an agreement to repair or replace, at his expense, all defects that may appear in that time, which in the opinion of the Engineer, are due to defective workmanship or materials.

C. Copies of factory warranties on all equipment furnished shall be submitted with the above described, written guarantee period, and included in maintenance manuals.

1.0.9. OPERATING AND MAINTENANCE RESPONSIBILITY

A. Contractor shall provide all required service and maintenance on all equipment installed under this contract for one (1) year following final acceptance or the beginning of beneficial use by the City. The starting date of one (1) year service period shall be determined by the City. Included in the service and maintenance to be provided during this one (1) year period, shall be the following:

1. All required lubrication, adjusting belt tensions, eliminating excessive noise and vibration.

2. Correcting all electrical and mechanical faults, recording all permanent installed gauge meter and temperature readings.

3. General service items, including the answering of service calls.

B. Service during construction:

1. General: Competent and experienced technical representatives shall represent the manufacturers of all equipment and systems as many days as may be necessary to resolve assembly or installation problems at the worksite which are attributable to, or associated with, the equipment furnished. This requirement applies to manufacturers of all equipment furnished, whether or not specifically set forth in the Technical Specifications.

2. Manufacturer's Certificate of Proper Installation: Where called for in the Technical Specifications, the manufacturer's representative shall provide a certificate stating that the equipment or system has been installed in accordance with the manufacturer's recommendation and has been inspected by a manufacturer's authorized representative, that it has been serviced with the proper initial lubricants, that applicable safety equipment has been properly installed, and that the proper electrical and mechanical connections have been made.

C. Functional testing assistance:

1. Where functional (or run) testing is called for on the Technical Specifications, the manufacturer's representative shall assist with the initial test, which shall include checking for proper rotation, alignment, speed, excessive vibration, and noisy operation. Initial equipment and system adjustment and calibrations shall be performed in the presence of and with the assistance of the manufacturer's representative. The previously specified Manufacturer's Certificate of Proper Installation shall include the statement that proper adjustment has been made and that the equipment or system is ready for plant startup and operation.

2. The Contractor, as applicable to the equipment furnished, shall state in writing that all necessary hydraulic structures, piping systems, and valves have been successfully tested; that all necessary equipment systems and subsystems have been checked for proper installation, started, and successfully tested to indicate that they are all operational; that the systems and subsystems are capable of performing their intended functions; and that the facilities are ready for startup and intended operation.

3. Training of Owner's Personnel:
   Where called for in the specifications, the manufacturer's representative shall provide detailed instructions to the City personnel for operation and maintenance of the specified equipment. These training services shall include pre-startup classroom and onsite equipment instruction and/or post-startup classroom and onsite equipment instruction, as stated in the specifications.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Where the City has obtained various permits for this Project, copies will be appended at the rear of the Specifications.

B. The Contractor shall familiarize himself with, and comply with, all requirements of these permits and their issuing authorities. All other necessary permits shall be obtained by the Contractor.

C. The Contractor's particular attention is called to any special conditions of the permits relating to construction procedures, excavation and backfill requirements, open trench restrictions, asphalt concrete pavement restoration, turbidity controls, and all other general and special conditions. In the event any of the conditions of the permits are in conflict with the requirements of these Specifications, the more stringent conditions of the permits shall take precedence.

D. Any deviations from the Plans, Specifications or permits appended thereto, must first be approved by the Engineer even if approval for the change has been given by the permitting agency.

E. The Contractor shall assume throughout the life of the Contract all obligations and responsibilities imposed on the City as permittee of the aforementioned permits. All expenses necessary for compliance with the regulations and requirements of each permitting agency and its permit shall be borne by the Contractor and shall be included in his overall bid price.

F. The cost of any fees such as impact fees, inspection fees, etc. and the cost paid for all required permits shall be borne by the City. The Contractor shall pay the required fees, obtain the permit(s) and then upon submission of proof of cost to the City, be reimbursed for said cost out of the Permit Fee Dedicated Allowance Item. This shall apply only to required permits and fees. Permits obtained or fees paid for the advantage of the Contractor or non-required permits obtained for whatever reason shall not be reimbursed. The necessity or non-necessity of a permit or fee shall be determined by the Engineer whose word shall be final. As specified in the paragraph above, all costs of compliance with the permit(s) shall be borne by the Contractor and included in his bid price.

G. All surveying required by the Project permits shall be done by the Contractor's Registered Professional Surveyor and Mapper (PSM) licensed to practice in the State of Florida.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01750 MAINTENANCE OF TRAFFIC AND PUBLIC STREETS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor shall be responsible for providing the Engineer with Maintenance of Traffic (M.O.T.) plans for lane closures and/or detours for approval. These M.O.T. plans shall be produced by an individual employed by the Contractor and certified as "Work Zone Traffic Safety Supervisor" by the American Traffic Safety Service Association, ATSSA.

B. The Contractor shall be responsible for the maintenance of public streets and traffic control for the duration of the project. The cost of Traffic Control including the cost of any required off duty police officers shall be included under the appropriate bid item in the Proposal. If no bid item for this is included, said costs shall be included in other appropriate items of the bid and no extra compensation will be allowed.

1.0.2. REGULATIONS

A. As used herein, any reference to City of Opa-Locka, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over areas or streets, or their departments, published regulations, permits or data. The Contractor shall abide by all applicable laws, regulations, and codes thereof pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.

1.0.3. MAINTENANCE OF TRAFFIC (M.O.T.)

A. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control, and other provisions throughout the Project as required by the City of Opa-Locka, Miami-Dade County Department of Transportation and Public Works (MDCDTPW) Traffic Division, Florida Department of Transportation (FDOT), or other governing agency. Traffic shall be maintained according to corresponding typical traffic control details as outlined in the MDCDTPW Manual. No street shall be completely blocked, nor blocked more than one-half at any time, keeping the other one-half open for traffic, without specific approval. Hard closures require approval from the City of Opa-Locka Transportation Department

B. An off-duty City of Opa-Locka police officer is required. Off-Duty Office phone number is (305) 681-1033.

C. The Contractor shall provide all barricades with warning lights, necessary arrow boards and signs, to warn motorists of the work throughout the project. Adequate approved devices shall be erected and maintained by the Contractor to detour traffic.

D. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times.

E. The Contractor shall provide necessary access to all adjacent property during construction.

F. The Contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the MDCDTPW Manual. In addition, the Contractor shall be responsible for the resetting of all traffic control and information signing removed during the construction period.

G. Where excavations are to be made in the vicinity of signalized intersections, the Contractor is alerted that vehicle loop detectors may have been embedded in the pavement. Every effort has been made to show the approximate locations on the plans; however, the Contractor shall verify these locations by inspecting the site of the work and by contacting the Traffic Division. Any loop detector which is damaged by the Contractor, whether shown on the plans or not, shall be repaired or replaced by the Contractor, at his expense, and to the satisfaction of the Traffic Division.

H. **The Contractor shall notify the Traffic Division twenty-four (24) hours in advance of the construction date, and forty-eight (48) hours in advance of construction within any signalized intersection.**

I. Temporary pavement will be required over all cuts in pavement areas, and also where traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed, and the swale or median areas restored to their previous condition.

J. Pavement markings damaged during construction shall be remarked, as required by the Traffic Division.

PART 2 – PRODUCTS

2.0.1. MAINTENANCE OF TRAFFIC PLANS

A. For construction within the City public right-of-way, the Contractor shall submit two sets of maintenance of traffic (MOT) plans for review to the City of Opa-Locka Public Works Department and the agency having jurisdiction.

B. MOT plans should be designed and developed by a certified MOT Specialist when normal traffic flow will be impacted causing unexpected or confusing situations in unclear travel path for motorist/pedestrians when entering non advanced warning work zones. MOT work zone traffic controls separate and protect workers, pedestrians and motorists delineating areas closed to traffic.

C. MOT plans must be designed in accordance with the requirements of the agency having jurisdiction.

D. MOT plans must be site-specific.

E. MOT plans will be reviewed and approved by the agency having jurisdiction.

F. MOT plans shall be in color. **PART 3 – EXECUTION**

NOT USED

END OF SECTION

DIVISION 2 – SITE WORK

02210 SITE GRADING

PART – 1 GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor shall perform grading work within the limits, elevations and grades indicated on the plans and as specified herein.

1.0.2. RELATED WORK

A. Section 01031 "Grades, Lines and Levels".

B. Section 02314 "Excavation, Backfill and Fill for Structural Facility and Utility Systems".

C. Section 02510 "Asphaltic Concrete Pavement".

1.0.3. QUALITY CONTROL

A. The site shall be graded to the required elevations. Spot elevations are shown on the plans and the finished surfaces shall be uniformly sloped between these locations.

B. Suitable excavated material shall be used in the formation of embankments. The Contractor shall provide all additional fill material required to complete the embankments.

1.0.4. EXISTING CONDITIONS

A. Known underground, surface, and aerial utility lines and buried objects are based on best available data and indicated on the plans. Contractor shall verify all locations.

1.0.5. PROTECTION

A. Protect trees, shrubs, and lawns and other features remaining as part of final landscaping.

B. Protect bench marks, existing structures, fences, roads, sidewalks, paving, and curbs against damage from equipment and vehicular traffic.

C. Protect aerial, surface, or underground utility lines or appurtenance which are to remain.

PART 2 – PRODUCTS

2.0.1. FILL

A. Unless otherwise noted, suitable fill material shall be non-cohesive, non-plastic, granular mixture of local sand and lime rock, shall be free from vegetation, organic material or muck and shall contain not more than 8 percent material by weight which passes the No. 200 sieve. Broken concrete shall not be used in the fill. Fill material containing lime rock shall have sufficient sand to fill the voids in the lime rock, and no individual rocks or pieces of hard material that will not pass a 6-inch diameter ring shall be used in the fill; except that the upper 4-inches of all backfill or fills shall not contain any rock or hard material that will not pass a 3-inch diameter ring. All fill material shall be provided by the Contractor from any excess suitable on-site material or from off site sources, all subject to review and acceptance by the Engineer prior to use. The Contractor shall be responsible for determining the volume of material required for the site.

PART 3 – EXECUTION 3.0.1.

PREPARATION

A. Establish and identify required lines, levels, contours, and datums.

B. Maintain benchmarks, monuments, and other reference points. Re-establish if disturbed or destroyed at no cost to the City.

C. Before start of grading, establish the location and extent of utilities in the work areas. Notify utilities to remove and relocate lines which are in the way of construction.

D. Maintain, protect, reroute, or extend as required existing utilities to remain which pass through the work area.

3.0.2. REMOVAL OF TOPSOIL

A. Topsoil of horticultural value shall be stripped from areas of construction under this contract and stockpiled in area designated by Engineer. Said material shall be stockpiled separately from fill material.

B. Do not permit topsoil to be mixed with subsoil.

C. Do not strip topsoil when wet.

D. Do not drive heavy equipment over stockpiled topsoil.

3.0.3. ROUGH GRADING

A. Rough grade site to required levels, profiles, contours, and elevations ready for finish grading and surface treatment. Maintain the following:

1. Sodded areas: 4 ½-inches below finished grade elevation

2. Seeded areas: 6-inches below finished grade

3. Paved areas: 21½-inches below finished grade elevations

4. Shrub beds: 24-inches below finished grade elevations

5. Flower beds: 18-inches below finished grade elevations

6. Concrete sidewalks: 6-inches below finished grade elevations

B. Prior to placing fill material over undisturbed subsoil, scarify surface to depth of 6inches.

3.0.4. GRADING AND COMPACTION

A. Fill material shall be placed in lifts not to exceed 8-inches and compacted to a density of not less than 95 percent of maximum density at optimum moisture as determined by ASTM D 1557. Fill material shall be within plus or minus 2 percentage points of optimum moisture content. The minimum density acceptable at any location within the pavement subgrade shall be as specified in Section 02745 "Asphaltic Concrete Pavement".

3.0.5. FINE GRADING

A. After structures, bases and pavements are completed and the yard piping trenches backfilled, the disturbed areas of the site shall be fine graded. All construction debris, regardless of size, shall be removed. The completed surface shall be shaped and sloped to drain away from the structures. The completed surface shall be within 0.1 foot of the elevations shown on the plans, unless otherwise accepted by the Engineer. Minor adjustments to line and grade may be required as the work progresses in order to satisfy field conditions.

3.0.6. SURPLUS MATERIAL

A. Remove surplus materials from site.

B. Dispose of surplus material at no cost to the City.

END OF SECTION

02220 EXCAVATION – GENERAL

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The work specified in this section consists of the removal of protruding objects as required to prepare the area of the proposed construction, and the removal and disposal of all product and debris which are not required to be salvaged or nor required to complete the construction.

1.0.2. RELATED WORK

A. Section 02230 "Clearing and Grubbing".

B. Section 02314 "Excavation, Backfill and Fill for Structural Facility and Utility Systems".

PART 2 – PRODUCTS

NOT USED

PART 3 - EXECUTION

3.0.1. REGULAR EXCAVATION

A. Regular Excavation shall include roadway excavation and borrow excavation, as defined for each.

B. Roadway Excavation shall consist of the excavation and the utilization or satisfactory disposal, of all materials necessary for the construction of the roadway, side ditches, etc., within the limits of the roadway right of way as show in the plans.

3.0.2. BORROW EXCAVATION

A. Borrow Excavation shall consist of the excavation and satisfactory utilization of material from authorized borrow pits. It shall include only material that is suitable for the construction of roadway embankments or of other work of constructing embankment covered by the contract and unsuitable material in borrow areas furnished by the City, which must be excavated as determined by the Engineer, in order to obtain the suitable material.

3.0.3. LATERAL DITCH EXCAVATION

A. Lateral ditches shall include inlet and outlet ditches to structures and roadway, changes in channels of streams, and ditches parallel to the roadway right of way, as shown in the plans. Unless otherwise shown in the plans all excavation in that portion of lateral ditches beyond the limits of the roadway right of way, including the sections where dressing is required as provided in 120-11.1, shall be classified as Lateral Ditch Excavation.

3.0.4. SUBSOIL EXCAVATION

A. Where muck, rock, clay or other material within the limits of the roadway is unsuitable in its original position, the Contractor shall excavate such material to the cross sections shown in the plans or indicated by the Engineer, and shall backfill with suitable material, which shall be shaped to conform to the required cross sections. Where the removal of plastic soils below the finished earthwork grade is required, a construction tolerance from the lines shown in the plans as the removal limits, of plus or minus 0.2 foot in depth and plus or minus six inches (each side) in width will be allowed.

3.0.5. TRENCH EXCAVATION

A. General

1. Design, Provide, and maintain shoring, sheeting and bracing as necessary to support the side of excavations and to prevent detrimental settlement and lateral movement of existing facilities, adjacent property, and completed work.

B. Trench Excavation Plan: Prepare Trench Excavation Plan addressing the following topics:

1. Details or shoring, sloping, or other provisions for worker protection from hazards of caving ground.

2. Design assumptions and calculations.

3. Methods and sequencing of installing excavation support.

4. Proposed locations of stockpiled excavated material.

5. Minimum lateral distance from the crest of slopes for vehicles and stockpiled excavated materials.

6. Anticipated difficulties and proposed resolutions.

C. Removal of Excavation Support

1. Remove excavation support in a manner that will maintain support as excavation is backfilled or leave voids of backfill.

2. Do not begin to remove excavation support until support can be removed without damage to existing facilities, completed work, or adjacent property.

D. Trenches

1. For trench exceeding 5 feet in depth, provide adequate safety system meeting requirements of applicable state and local construction safety order, and federal requirements.

3.0.6. DEWATERING SYSTEMS

A. Any water which accumulates in the excavations for structures shall be removed promptly by means satisfactory to the Engineer of Record in such a manner as to not create a nuisance to adjacent property or public thoroughfare. Pumps and engines for dewatering systems shall be operated with mufflers and at a minimum noise level suitable to a residential area. The Contractor shall be responsible for any nuisance created due to the disposal of the water from his drainage system.
B. Where applicable, the Contractor shall be required to obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-way or into any existing drainage structure or facility.

3.0.7. STOCKPILING EXCAVATED MATERIAL

C. Stockpile excavated material that is suitable for use as fill or backfill until material is needed.

D. Post signs indicating proposed use of material stockpiled. Post signs that are readable from all directions of approach to each stockpile. Signs should be clearly worded and readable by equipment operators from their normal seated position.

E. Confine stockpiles to within easements, right-of-way, and approved work areas. Do not obstruct road or streets.

F. Do not stockpile excavated material adjacent to trenches and other excavations unless excavation side-slopes and excavation support systems are designed, constructed, and maintained for stockpile loads.

G. Do not stockpile excavated materials near or over existing facilities, adjacent property, or completed work, if weight of stockpiled material could induce excessive settlement.

H. Disposal of Spoil

3.0.8. DISPOSAL OF SURPLUS AND UNSUITABLE MATERIAL

A. Ownership of Excavated Materials

2. Owner of all suitable excavated material shall remain in the City until the final job requirements for fill or backfill materials have been fulfilled. Unless otherwise provided by the plans or special provisions, any surplus materials then remaining and not needed for job requirements shall become the property of the Contractor and are to be disposed of by him/her, outside the right of way, to the satisfaction of the Engineer.

3. In urban or other areas where temporary storage of apparent excess suitable materials within the right of way may be impracticable, the Contractor may stockpile the materials outside the right of way in areas provided by him/her. Until stock materials are needed in the job or are declared surplus. With the written approval of the Engineer, the Contractor may dispose of such apparent excess material with the

stipulation that he shall replace any portion of the disposed material required to fulfill the actual job requirements, with equally suitable material, at his own expenses.

4. No extra compensation will be allowed for any re-handling involved under the provisions of this Sub-article.

B. General Requirements for Disposal: Excavated muck or other materials unsuitable for the roadway construction shall be disposed of as shown in the plans or, if the plans do not indicate the disposal, the materials shall become the property of the Contractor and shall be disposed of by him/her outside the right of way.

C. Disposal of Muck on Side Slopes: As an exception to the provisions of 120-5.2 when approved by the Engineer, in rural undeveloped areas muck (A-8 material) may be placed on the slopes, or may be stored alongside the roadway, provided there shall be a clear distance of at least six feet between the roadway grading limits and the muck, and the muck shall be so dressed as to present a reasonably neat appearance. In addition, disposal of this material by placing on the slopes may also be permitted in developed areas where, in the opinion of the Engineer, this will result in an esthetically pleasing appearance and will have no detrimental effect on the adjacent developments. Where muck or other unsuitable material is permitted to be disposed of inside the right of way limits, such material shall not be placed such as to impede the inflow or outfall of any channel or of side ditches. The Engineer shall determine the limits adjacent to channels within which such materials shall no be placed.

D. Disposal of Paving Materials: Unless otherwise indicated in the plans, paving materials excavated in the removal of existing pavements, such as paving brick, asphalt block, concrete slab, lime-rock, sidewalk, curb and gutter, etc., shall become the property of the Contractor and shall be disposed of by him/her outside the right of way. If the materials are to remain the property of the City, they shall be placed in neat piles as directed.

E. Disposal Areas: Where the plans or specifications require the Contractor to dispose of excavated materials outside the right of way, and the disposal area is not indicated in the contract documents, the Contractor shall furnish the disposal area without additional compensation. Areas provided by the Contractor for disposal of removed paving materials shall be out of sight of the project and at least 300 feet from the nearest roadway right of way line of any State-maintained road. The 300-foot limitation will not apply, however, if the materials are buried.

1.0.10 USE OF PUBLIC STREETS

A. Ownership of use of public streets and alleys shall be such as to provide a minimum of inconvenience to the public and to other traffic. Any earth or other excavated material spilled from trucks shall immediately be removed by the Contractor and the streets cleaned to the satisfaction of the governing authority.

B. The City has not made any attempt to define the equipment to be used in transporting the excavated material since this may vary, however, the Contractor shall abide by the following general requirements:

1. Transport vehicles must be of the type(s) approved for this application by the political jurisdictions involved. General requirements are that the vehicles have watertight bodies that they be properly equipped and fitted with seals and covers to prohibit material spillage or draining, and that they be cleaned as often as is necessary to prevent deposit of material on roadways. Vehicles must be loaded within all legal weight limits and operated safely within all traffic and speed regulations.

2. Access to businesses, schools and homes along the route of the work must be provided by the Contractor at all times.

3. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained with temporary asphalt that will allow normal vehicular traffic to pass over.

END OF SECTION

02230 CLEARING AND GRUBBING

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Unless otherwise shown in the plans, Standard Clearing and Grubbing shall be done within the following areas:

1. All areas where excavation is to be done, including borrow pits, lateral ditches, right of way ditches, etc.

2. All areas where roadway embankments will be constructed.

3. All areas where structures will be constructed, including pipe culverts and other pipelines.

4. Any other areas specifically called for on the plans to be cleared and grubbed.

1.0.2. DEFINITIONS

A. Clearing shall consist of the cutting, removal and satisfactory disposal of all trees, stumps, brush, shrubs, rubbish and any other objectional material within the designated areas.

B. Grubbing shall consist of the removal and disposal of all stumps larger than 1-1/2 inches in diameter and other objectional material to a depth of at least 12 inches below the ground surface.

1.0.3. QUALITY ASSURANCE

A. In the course of the work, it may become to remove trees if they interfere with the work. Dade County and various municipalities have ordinances regulating the removal, relocation and pruning of trees in the public right-of-way, these ordinances shall be strictly adhered to. The Contractor shall obtain a permit from Dade County and/or other regulatory agencies having jurisdiction over the work area before removing, relocating and/or pruning any tree. The Contractor shall comply with all requirements and conditions of the permit.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.0.1. CLEARING AND GRUBBING

A. The Contractor shall remove and replace, where required all existing shrubbery, trees, grass, sprinklers, fences, signs, mailboxes, structures, roadways, sidewalks, curbs and similar items or structures in the way of all excavation necessary for the construction of the project.

B. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges. Where such cutting is for the purpose of pipeline installation, saw cutting shall be either parallel or at right angles with the centerline of the pipe.

C. To protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction, prior to proceeding with any work in the vicinity.

3.0.2. DEPTHS OF REMOVAL OF ROOTS, STUMPS AND OTHER DEBRIS

A. In all areas where excavation is to be done and where the excavated material is to be used in the construction of roadway embankment or roadway base or pavement; also in all areas where roadway embankment will be constructed; roots and other debris shall be removed to a depth of at least one foot below the ground surface. The surface shall then be plowed to a depth of at least six inches and all roots thereby exposed shall be removed to a depth of at least one foot. All stumps within the roadway right of way shall be completely removed and disposed of by the Contractor.

B. Where excavation is done within the roadway area and where excavation for structures is done, all roots, etc., protruding trough or appearing on the surface of the completed excavation shall be removed to a depth of at least one foot below the excavation surface.

C. In borrow pits, material pits and lateral ditches, all stumps, roots, etc., protruding through or appearing on the surface of the completed exaction shall be removed or cut off below the finished excavation surface.

D. In borrow and material pits no clearing or grubbing shall be done to within three feet inside the right of way line.

E. Within all other areas where Standard Clearing and Grubbing is to be done, roots and other debris, projecting through or appearing on the surface of the original ground, shall be removed to a depth of one foot below the surface, but no plowing and harrowing will be required in these areas.

3.0.3. TREES TO REMAIN

A. As an exception to the above provisions, where so directed by the Engineer, desirable trees within the roadway and project site area shall be trimmed, protected and left standing. Branches of trees extending over the area occupied by the roadway shall be trimmed as directed, to give a clear height of 16 feet above the roadway.

3.0.4. BOULDERS

A. Any boulders encountered in the roadway excavation, or found on the surface of the ground, shall be removed and placed in neat piles inside the right of way and adjacent to the right of way line.

3.0.5. SELECTIVE CLEARING AND RUBBING

A. Selective Clearing and Grubbing shall consist of removing and disposing of all vegetation, obstructions, etc., as provided above except that, where the Contractor so elects roots, etc., may be cut off flush with the ground surface. Stumps shall be completely removed and disposed of by the Contractor. Undergrowth shall be entirely removed except in specific areas designated by the Engineer to remain for aesthetic

purposes. Desirable trees shall be trimmed, protected and left standing, with the exception of such trees as the Engineer may designate to be removed in order to facilitate right of way maintenance. Undesirable or damage trees (as so designated by the Engineer), shall be removed. Selective Clearing and Grubbing shall be done only in areas so designated in the plans.

3.0.6. PROTECTION OF ADJACENT AREAS

A. The Contractor shall protect areas shown on the drawings or designated by the Engineer of Record to remain protected from damage by construction operations by erecting suitable barriers of other acceptable means.

B. Property obstructions which are to remain in place, such as buildings, sewers, drains, water or gas pipes, conduits, poles, walls, posts, bridges, etc., are to be carefully protected from damage and are not to be displaced.

3.0.7. DISPOSAL

A. All roots, vegetation and other refuse removed from the site during clearing and/or grubbing operations shall be legally disposed of by the Contractor. Where required, the Contractor shall obtain a permit from Miami-Dade County and/or other regulatory agencies having jurisdiction over the work area before burning any material on the site.

END OF SECTION

02314 EXCAVATION, BACKFILL AND FILL FOR STRUCTURAL FACILITY AND UTILITY SYSTEMS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The work included under this Section consists of furnishing material and equipment, and performing all labor necessary for excavating, backfilling, filling and compaction of areas to be occupied by facilities or utility systems to be constructed.

B. Plan For Excavation: Prior to commencing the excavation, the Contractor shall submit a plan of his proposed operations to the Engineer of Record for approval. The Contractor shall consider, and his plan for excavation shall reflect, existing utilities that are to remain, the equipment and methods to be employed in the excavation.

1.0.2. QUALITY ASSURANCE

A. All excavations shall conform with South Florida Building Codes, the State of Florida Trench Safety Act, OSHA requirements and the provisions herein. Excavations shall be executed in accordance with all applicable requirements of Section 01016, including notification of Sunshine State One-Call Center (1-800-432-4770) 48 hours prior to any excavation.

B. Work shall be performed in accordance with Contract Documents, Drawings, and/or City of Opa-Locka Public Works Manual Specifications and Standard Details, in a neat and accurate manner. It is the intent of the City to obtain a complete and working installation according to these Specifications, and any items of labor, equipment, or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the project plans or stated herein.

C. Asphalt Acceptance Standards: The following minimum defects identified by the City or designee must be covered by warranty (but not limited to):

1. Sunken pavement patches greater than or equal to one-quarter (¼) inch (measured by a twelve (12) foot straight edge).

2. Surface raveling or oxidation due to deficiencies with the asphalt material.

3. Poor workmanship.

4. Inadequate compaction per Standards and Specifications.

PART 2 – PRODUCTS 2.0.1.

BACKFILL MATERIAL

A. Except where a 1:10 cement/sand or flowable fill concrete mix is required, granular soil backfill materials shall be utilized. Suitable backfill material shall be clean, shall not be expansive nor have high organic content, shall be free of clay, marl, unstable materials, debris, lumps and clods, and shall meet the following requirements.

1. Maximum Liquid Limit shall not exceed 12 as determined by ASTM D4318.

2. Maximum Plasticity Index shall not exceed 35 as determined by ASTM D4318.

3. Not more than 10 percent of weight shall be finer than 74-micron (No. 200) U.S. Standard Sieve.

B. Backfill material containing limerock shall have sufficient sand to fill the voids in the limerock. No stones or rocks larger than 6-inches in diameter will be permitted in any backfill.

C. Debris, broken paving, or broken concrete shall not be used.

D. Material for backfill may be material resulting from excavation, only if it meets the above mentioned requirements, or if suitable in the opinion of the City or designee. If sufficient suitable backfill material, including select backfill material, is not available from the site, additional material shall be furnished.

2.0.2. SELECT BACKFILL

A. Select backfill material specified herein shall meet all the general requirements for backfill material set forth in 2.01, and in addition, shall be free of any rocks or stones larger than 2 inches in diameter. Select backfill material may be material resulting from trench excavation, if suitable in the opinion of the City or designee, carefully selected to comply with these requirements.

1. Trenches remaining open to facilitate the repair of existing underground utilities damaged by the Contractor during excavation shall not be deemed a portion of the allowable 600 feet of open trench, unless otherwise decided by the Engineer, at his discretion.

2. **Backfilling and compaction shall be kept up with the rate of pipe laying. Backfill consisting of the specified material shall be placed and properly compacted, to the degree specified hereinafter. Unless otherwise ordered or approved by the Engineer, in writing, no temporary fill, refill, or uncompacted fill shall be installed. Under no circumstances shall backfill material other than that specified or an approved equal be installed. Backfill shall be placed and compacted immediately after installation of piping.**

3. Where existing paving is damaged or removed, temporary paving, as specified hereinafter shall be placed the same day as the ditch backfill and compaction and it shall be replaced with permanent paving within thirty (30) days, to the limits shown in the City's Standard Details or directed by the Engineer.

4. Backfillling and compaction of trenches will not be allowed until the work has been inspected by the Engineer, and the Engineer indicates that backfilling and compaction may proceed. Any work covered up or concealed without the

knowledge or consent of the Engineer may be required to be uncovered or exposed at no cost to the City.

5. The Contractor shall backfill and compact all trenches and other excavations made in the process of installing the pipe. The cost of all backfilling and compaction shall be included in the price bid under the various Items. The Contractor shall maintain the surface of the backfill free from major irregularities and potholes. Backfill to a point at least one (1) foot above the pipe shall be select backfill material not exceeding two (2) inches in diameter. Above this point, backfill shall be of material not exceeding six (6) inches in diameter.

6. Backfilling and compacting of material under and around the pipe and to one (1) foot above the crown shall be in layers not exceeding six (6) inches in thickness. Each layer shall be thoroughly compacted to at least 98 percent of maximum density as determined by AASHTO Standard No T-180-74, "Moisture-Density Relations of Soils using a 10-lb. (4.54 Kg.) Rammer and an 18 in. (457 mm) Drop." The material in the ditch may be compacted by either hand tamper or a mechanized power tamper, provided the results obtained meet the continued approval of the Engineer.

7. Backfilling and compacting of material lying above a point one (1) foot above the crown of the pipe and below the pavement base or the surface of the ground if out of pavement shall be accomplished in layers not exceeding six (6) inches in thickness. Each layer shall be thoroughly compacted with a powered hand tamper or a mechanized power tamper to at least 98 percent of maximum density as determined by AASHTO Specification T-180-74 or such greater density as may be required by the governing authority over the area in which the work is performed.

8. A testing laboratory, designated by the City, will make periodic field tests to determine the density being obtained in each lift, or layer, of the backfill. The City will pay the cost for each test that indicates that the density obtained in the backfill meets or exceeds the specified percentage. Contractor shall pay the cost for each test that indicates that the density obtained in the backfill is insufficient and does not meet the specified percentage. When compacted backfill fails to meet the specified percentage of maximum density as shown by test results, it shall be reworked and recompacted in a manner approved by the Engineer, and then retested. The reworking, recompacting and retesting of the backfill shall be repeated as many times as may be necessary to obtain compacted backfill with density meeting or exceeding the specified percentage as indicated by test results. The Contractor shall exercise proper care to ensure that no pipe will be broken or displaced through the use of the type of mechanical compacting equipment he selects. Water shall be added as required to obtain optimum moisture to facilitate compaction, but ponding or inundation of backfill will not be permitted. These ponding limitations shall not prohibit backfill in a wet trench up to the level of the

natural water table if the "Alternate Method of Construction" is utilized. See Section 02220 "Excavation – General".

9. Backfill and compaction shall be kept up with the rate of pipe laying. The backfill up to the spring line of the pipe shall be placed and compacted as soon as practical after the laying of the pipe.

10. On parts of the line where ground water level may be high enough to float the pipe, the placing of the backfill and the rate of pumping the trench shall be so controlled as to prevent the pipe from floating or moving from the line and grade shown on the Plans.

11. In the event that sufficient suitable material is not available at any point to properly backfill the trench, the Contractor shall transport suitable material from points of the line where such material is available or shall otherwise furnish suitable material at no additional cost to the City.

12. Suitable material in excess of all backfill requirements shall be removed from the work and disposed of by the Contractor. The cost for removal shall be included in the overall Project cost bid.

13. Where cuts have been made through unpaved, stabilized rock roadways, driveways and parkways, surface restoration shall consist of 3 inches of compacted limerock overlaid by 3 inches of gravel or graded and washed rock with a maximum diameter of 1/2-inch except as otherwise directed by the Engineer. The rock shall be installed over the entire width of the disturbed area and shall closely match the existing rock at each location. Several grades of rock may be required to attain this end, but it is not anticipated that more than one grade will have to be used at any one location. The cost for replacement of gravel or rock stabilized driveways and roadways shall be included in the overall Project cost bid unless a specific Bid Item is established in the Quotation.

14. Backfill material shall consist of the suitable excavated material being stored for this purpose. Backfill material placed within one (1) foot of piping and appurtenances shall not contain any stones or rocks larger than two (2) inches in diameter, and no stones or rocks larger than 6 inches in diameter will be permitted in any backfill. Backfill material containing mangrove muck or other unsuitable materials shall not be used.

15. During the backfilling operation, care shall be taken to preserve the alignment and gradient of the installed pipe.

2.0.3. SUITABLE BACKFILL

A. Suitable backfill material shall be clean and free from all organic material, clay, marl or unstable materials, debris, lumps, broken paving, or other deleterious material. No rocks or stones larger than 3½ inches in diameter shall be allowed in any suitable backfill. Material for backfill may be material resulting from excavation, if suitable in the opinion of the City or designee.

2.0.4. STRUCTURAL FILL

A. Structural fill shall consist of an inorganic, non-plastic, granular soil containing less than 10% material passing the No. 200 mesh sieve (relatively clean sand or crushed limerock with a 2 inches max. particle size) with a Unified Soil Classification of GP, GW, SP, SPGM, SW-SM or SP-SM.

2.0.5. UNSUITABLE FILL AND BACKFILL MATERIAL

A. Unsuitable fill and unsuitable backfill material shall be all material not meeting the definition of Structural Fill, Suitable Backfill, or Select Fill and cannot be amended or blended in the field to meet the standard of one of these fills. Unsuitable Fill material may contain deleterious material including but are not limited to: cherty or other extremely hard pieces, lumps, balls or pockets of sand or clay size material, organic matter, muck, loose sand, loose free shells, corals or skeletal remain of other marine invertebrates retained on the No. 4 sieve, or water sensitive clay minerals.

2.0.6. BEDDING MATERIAL

A. Pipe bedding material shall be accordance with the Culvert Pipe Manufacturer's Standard Details, firstly, and FDOT if not specified.

B. Bedding may be select backfill material, as specified above, if approved by the City or designee.

C. No. 57 stone may be used for bedding of piping (except for copper pipe) and/or manholes as shown on the Standard Details.

D. Sand for bedding shall be dry screened. Sand shall be graded sand with 100% passing a ⅜ inch sieve and not more than 5% passing a No. 200 sieve.

E. Limerock screenings, sand or other fine material shall not be used for bedding.

F. All pipe bedding material shall be new, unless otherwise approved by the City or designee. Existing pipe bedding material may not be used.

2.0.7. NO 57. STONE

A. No 57 stone shall be crushed stone (or drain field limerock). Crushed stone shall consist of hard, durable, sub-angular particles of proper size and gradation, and shall be free from organic material, wood, trash, sand, loam, clay, excess fines, and other deleterious materials. The stone shall conform to the requirements of ASTM C 33, Size No. 57 (3/4- inch rock) and be graded within the following limits:

Sieve size	Percent Finer by Weight
1-½ inch	100
1 inch	95 to 100
½ inch	25 to 60
No. 4	0 to 10
No. 8	0 to 5

2.0.8. BALLAST ROCK

A. Ballast rock shall be composed of hard, durable, sound pieces having a specific gravity of not less than 2.65. It shall be crushed rock conforming to the following gradation:

Sieve size	Percent Finer by Weight
1-½ inch	100
¾ inch	30 to 75
½ inch	15 to 55
¼ inch	0 to 5
No. 8	0 to 5

2.0.9. SEPARATOR GEOTEXTILE

A. If required by Geotechnical Report, roadways shall be demucked or stabilized with a separator geotextile in accordance with the Geotechnical Report.

B. Laboratory analysis shall be completed, and all material to be used in the construction of the road shall be approved by the City or designee prior to placement.

C. Separator geotextile shall be made from woven fabric, meeting the physical requirements of FDOT Specifications Section 985 and placed as per manufacturer's Specifications or as directed by the City or designee. At a minimum, separator geotextile shall have 1 foot overlap, and upslope segments must overlap on top of down slope segments.

D. Follow the manufacturer's recommendations regarding protection from direct sunlight. At the time of installation, the City or designee will reject the material if it has defects, tears, punctures, flaws, deterioration, or other damage. However, if approved by the City or designee, the Contractor may repair torn or punctured sections by placing a patch over the damaged area following manufacturer's recommendation. The Contractor shall replace or repair any rejected geosynthetic at no additional expense to the City.

E. Repair existing or newly installed separator geotextile by a patch consisting of the same material as the reinforcement separator geotextile over the damaged area. Overlap the undamaged reinforcement separator geosynthetic with the patch a minimum of 5 feet in all directions. Replacement of existing separator geotextile material shall be of similar or better quality and shall meet the requirements as provided in FDOT Specifications, Section 985.

2.0.10. STEEL – REINFORCING

A. Bar reinforcement for concrete structures shall conform to the requirements of ASTM A615, "Deformed and Plain Billet-Steel Bars for Concrete Reinforcement," Grade 60, Deformed, except that Steel manufactured by the Bessemer Process will not be accepted. Wire mesh reinforcing for concrete structures shall be welded wire fabric meeting the requirements of ASTM A185 "Steel Welded Wire Fabric, Plain, for Concrete Reinforcement."

B. The Contractor shall furnish the Engineer with the manufacturer's test certificates showing the Steel to meet the above requirements, in addition to which the Engineer may take representative samples from the material on the job and have them tested by an independent testing laboratory.

C. Completely detailed shop drawings and bending schedules shall be submitted by the Contractor for the approval of the Engineer. Such approval shall be obtained before the bars are cut and bent.

2.0.11. STEEL – SHEET PILING

A. Steel sheet piling shall conform to the requirements of ASTM A572 "High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality," (AASHTO No. M223) or ASTM A328 "Steel Sheet Piling."

B. The Contractor will be responsible for design and selection. Structural plans for the sheet steel piling installation and the calculations for the required Section Modulus and the Sheet Piling Designation shall be prepared by a registered professional engineer licensed to practice in the State of Florida. Sealed plans shall be submitted to the Engineer for approval prior to installation of the piling system.

C. Structural steel shall meet the requirements of ASTM A36 "Structural Steel."

D. Whenever shoring is required, locate the system to clear permanent construction and to permit forming and finishing of concrete surfaces. Provide shoring system adequately anchored and braced to resist earth and hydrostatic pressures. Shoring system adequately anchored and braced to resist earth on which the support or stability of existing structures is dependent must be left in place at completion of work. Maintain bracing until structural elements are supported by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

PART 3 – EXECUTION 3.0.1.

PREPARATION

A. The Contractor shall remove and replace, where required, all existing shrubbery, trees, grass, sprinklers, fences, signs, mail boxes, guard rails, structures, roadways, sidewalks, curbs and similar items or structures in the way of the culvert and shall make all excavation necessary for the construction of the culvert, to the lines and grades shown on the Plans. Weeded areas shall be restored as specified in Section 02900 "Landscaping", Care of Trees, Shrubs and Grass. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall in general be either parallel or at right angles with the centerline of the culvert. Unless specific bid items are provided in the Quotation form, the cost of removing and replacing any plantings or existing structures shall be included in the price bid. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the Engineer.

B. Clearing: The construction site shall be cleared of all obstructions and vegetation, including large roots and undergrowth, within 5 feet of the lines of excavation, in accordance with Section 02230 "Clearing and Grubbing". All debris created by this clearing operation shall be hauled from the site and disposed of by the Contractor.

1. All cleared materials shall be promptly removed from the work area and disposed of in an area provided by the Contractor, at no additional cost to the City. Accumulation of debris or stockpiling along the route of the work will not be allowed.

C. Removals: Complete all removals within the lines of excavation prior to beginning excavation. Where required, all existing shrubbery, trees, grass, sprinklers, fences signs, mailboxes, structures, sidewalks, curbs, utility poles, or structures subject to

damage resulting from the excavation should be transplanted, relocated, braced, shored, or otherwise protected and preserved.

3.0.2. EXCAVATION

A. Excavation shall be conducted in accordance with FDOT Specifications, Section 120.

B. Where rock, clay, or other material within the limits of the roadway is unsuitable in its original position, the Contractor shall excavate such material to the cross sections shown in the Plans or indicated by the City or designee, and shall backfill with suitable material, which shall be shaped to conform to the required cross sections. Where the removal of plastic soils below the finished earthwork grade is required, a construction tolerance from the lines shown in the Plans as the removal limits as defined by the Geotechnical Engineer of plus or minus 0.2 feet in depth and plus or minus six (6) inches each side in width will be allowed.

C. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depths shown on the approved plans, but in all cases as required for construction, and as specified herein. All excavations shall be made by open cut. All existing utilities such as pipes, poles, and structures shall be carefully located, supported, and protected from injury; in case of damage, they shall be restored at the Contractor's expense.

D. When the walls of the excavations are to be kept vertical and in order to protect the safety of workmen, the general public, this or other work or structures, or excavation walls, or pipe installation including materials encountered in the excavation which have a tendency to slough or flow into the excavation, undermine the banks, weaken the overlying strata, or are otherwise rendered unstable by the excavation operation shall be retained by steel sheeting, stabilization, grouting or approved methods. Said methods shall comply with the Trench Safety Act (TSA). Sheeting and shoring or other approved method shall be designed by a Professional Engineer licensed to practice in the State of Florida.

E. For structures, the Contractor shall maintain the bottom of the excavation firm and dry and maintain an elevation of the water one (1) foot below the concrete to be placed, by use of pumps, tremie or other acceptable method.

F. Pipe trench excavation shall be in accordance with the appropriate Standard Detail in the Miami-Dade County Public Works Manual or FDOT.

G. The Contractor shall excavate pipe trenches to a minimum of 6 inches below the outside bottom of the proposed pipe barrel to provide for the installation of the bedding material.

H. Not more than 100 feet of trench shall be opened ahead of pipe laying operations at one time unless a greater length of open trench is approved by the Engineer.

I. If, in the opinion of the Engineer, the soil at that depth is unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the excavation shall be continued two (2) feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required. The cost of this extra excavation, and backfilling with select backfill material, shall be included in the price for pipe laying and no additional payment will be made for this work.

J. If the soil is still unsuitable after the additional excavation as prescribed above, and the Engineer authorizes "Overcut," the trench bottom shall be excavated further in one (1) foot increments and paid for as "Trench Overcut." See below 3.0.6. "Trench Overcut.

K. Trench widths, when measured at a point 12 inches above the top of the pipe, shall provide a 12 inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench width shall provide at least 6 inch clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used.

For excavations five (5) feet deep or less, sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures. When an excavation is in excess of five (5) feet deep, the Contractor shall comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act." Method(s) of compliance used shall protect the workmen and the general public, prevent damage to this or adjacent work, structures, utilities, pavements, sidewalks, curbs, gutters and similar improvements both public and private, and provide for proper maintenance of traffic. The trench width may vary to accomplish this and to comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act," but only from a point one (1) foot above the top of the pipe.

L. For trench exceeding 5 feet in depth, provide adequate safety system meeting requirements of applicable Local, State, and Federal requirements.

M. In areas where trench widths are not limited by right-of-way or easement widths, property line restrictions, existing adjacent improvements including pavements, structures, and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material.

N. In areas where trench widths are not limited by site constraints the trench sides may be sloped to a stable angle of repose of the excavated material but only from a point one foot above the crown of the pipe. A substantially and safely constructed

movable shield, "box" or "mule" may be used in place of sheeting when the trench is opened immediately ahead of the shield and closed immediately behind the shield as pipe laying proceeds inside the shield.

O. Ladders or steps shall be provided for and used by workmen to enter and leave trenches.

P. Excavated material shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks. In congested areas, such materials, cannot be stored adjacent to the trench nor used immediately as backfill, shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, it shall be removed immediately to a storage area.

Q. Materials suitable for use as backfill be hauled to and used in areas where not enough suitable material is available from the excavation. Suitable material in excess of backfill requirements shall be used on the site as directed by the City or designee, or removed at the Contractor's expense. Any pockets of organic matter, concrete or other unsuitable material encountered in excavating shall be removed and replaced with material satisfactory to the City.

R. The excavation of walls for forms will not be permitted.

S. The trench wall shall be kept at a stable angle of repose to maintain trench widths within the limits hereinafter specified or shown on the Plans.

T. The trench, when in rock, shall be excavated to a width within the limits of the top of the pipe and the trench bottom so as to provide a clearance on each side of the pipe barrel, measured to the face of the excavation, of 12 inches. Rock or removal in the excavation shall be considered a part of the excavation and as such no additional payment shall be made therefore. Where excavation is in silt, the width of trench bottom shall be pipe O.D. plus two (2) feet with the trench walls being kept at a stable angle of repose. All pipe trenches shall be excavated to a level at least 12 inches below the outside bottom of the proposed pipe barrel.

U. Where wood sheeting or certain designs of steel sheeting are used, the City may require that the sheeting be cut off at a level two (2) feet above the top of the installed pipe and that portion below that level be left in place. If ordered left in place, sheeting and shoring shall be paid for under the appropriate Quotation Item.

V. If interlocking steel sheeting is used, the City may permit its complete removal in lieu of the cut-off, providing removal can be accomplished without disturbing the bedding, pipe or pipe alignment. Any damage to the pipe bedding, pipe or pipe alignment shall be cause for rejection of the affected portion of the work.

W. A substantially and safely constructed moveable shield or box, as approved by the Engineer, may be used in place of sheeting when the trench is opened immediately behind the shield as pipe laying proceeds inside the shield. All construction in conjunction with using such a shield must be as approved by the Engineer, including excavation, installation of pipe and backfilling and compaction.

X. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depth shown on the Plans, or as directed by the Engineer. All excavations shall be made by open cut. Any existing utilities such as pipes, cables, etc., shall be carefully supported and protected from damage, and in case of damage, they shall be restored at no cost to the City.

Y. Excavation for other piping and appurtenances shall be sufficient to leave at least 12 inches clear between their outer surfaces and the embankment or sheeting that may be used to protect them.

Z. Provide excavation support as necessary to support sides of excavations and prevent detrimental settlement and lateral movement of existing facilities, adjacent property, and completed Work.

AA. Remove excavation support in a manner that will maintain support as excavation is backfilled or leave voids of backfill. Do not begin to remove excavation support until support can be removed without damage to existing facilities, completed Work, or adjacent property.

BB. Materials removed from the trenches shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks and they shall not be placed on private property. In congested areas, such materials as cannot be stored adjacent to the trench or used immediately as backfill shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, in the opinion of the Engineer, it shall be removed immediately by the Contractor to a storage area.

CC. The Contractor shall temporarily store excavated material suitable for backfill in full compliance with the provisions of the permits. All mud, silt, debris and other material unsuitable for backfilling the trench shall be removed and legally disposed of offsite by the Contractor. The Contractor shall make his own arrangements regarding stock piling of excavated suitable material and storage and assembly space to properly and safely carry out the construction. Any agreements entered into by the Contractor and property owners shall hold the City harmless. Storage of excavated material shall not cause environmental problems and shall be performed at no additional cost to the City.

DD. Excavation for structures:

1. Clear, as stated above, all existing items or structures in the way of the proposed pipeline or structures and excavate as necessary to the depths and dimensions shown on the plans, but in all cases as necessary for satisfactory installation.

2. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall, in general, be either parallel or at right angles.

3. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the City.

4. Where interlocking steel sheeting is used, the City may require that the sheeting be cut off at a level two (2) feet above the top of the installed pipe and that portion below the level be left in place.

5. Excavation for manholes and other piping appurtenances shall be sufficient to leave at least two (2) feet clear between their outer surfaces and the embankment or sheeting.

6. If, in the opinion of the Engineer of Record or the City, the soil at that depth is unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the excavation shall be continued two (2) feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required.

7. When the pipe to be installed in a trench requires the pipe installers to work under and around the pipe, the Contractor may request the City that he be allowed to exceed the 12" maximum clearance, specifying the clear distance desired.

8. The ends of existing mains shall be temporarily capped or plugged to keep them clean and the ends of all mains shall be temporarily anchored to keep the joints from blowing apart from internal pressure until the new mains can be reconnected to them.

9. In addition to specific construction methods specified, the general requirements in subsequent subsections, below, shall apply to the work of this project.

3.0.3. TRENCH STABILIZATION

A. No claim for extras or additional payment will be considered for cost incurred in the stabilization of trench bottoms which are rendered soft or unstable as a result of

construction methods, such as improper or inadequate sheeting, or other causes. In no event shall pipe be installed when such conditions exist and the Contractor shall correct such conditions so as to provide proper bedding or foundations for the proposed installation at no additional cost to the City.

3.0.4. SHEETING AND SHORING

A. Contractor shall be solely responsible for the design, installation, and maintenance of shoring, sheeting, and bracing as necessary to support the sides of excavations and to prevent detrimental settlement and lateral movement of existing facilities, adjacent property, and completed Work. Design of shoring or other excavation support shall be provided by a Professional Engineer licensed in the State of Florida. Prior to trench excavation, a Trench Excavation Plan shall be prepared and shall address the following topics.

1. Details of shoring, sloping, or other provisions for worker protection from hazards of caving ground.

2. Design assumptions and calculations.

3. Methods and sequencing of installing excavation support.

4. Proposed locations of stockpiled excavated material.

5. Minimum lateral distance from the crest of slopes for vehicles and stockpiled excavated materials.

6. Anticipated difficulties and proposed resolutions

B. Sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures.

C. For excavations five (5) feet deep or less, sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures. When an excavation is in excess of five (5) feet deep, the Contractor shall comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act." Method(s) of compliance used shall protect the workmen and the general public, prevent damage to this or adjacent work, structures, utilities, pavements, sidewalks, curbs, gutters and similar improvements both public and private, and provide for proper maintenance of traffic. The trench width may vary to accomplish this and to comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act," but only from a point one (1) foot above the top of the pipe.

D. Trench widths, when measured at a point 12 inches above the top of the pipe, shall provide a 12-inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench width shall provide at least 6-inches clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used.

E. Where wood sheeting or certain designs of steel sheeting are used, the City may require that the sheeting be cut of at a level two (2) feet above the top of the installed pipe and that portion below that level be left in place. If ordered left in place, sheeting and shoring shall be paid for under the appropriate Quotation Item.

F. If interlocking steel sheeting is used, the City may permit its complete removal in lieu of the cut-off, providing removal can be accomplished without disturbing the bedding, pipe or pipe alignment. Any damage to the pipe bedding, pipe or pipe alignment shall be cause for rejection of the affected portion of the work.

G. In areas where trench widths are not limited by right-of-way and/or easement widths, property line restrictions, existing adjacent improvements, including pavements, structures and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material, but only from a point one (1) foot above the crown of the pipe.

3.0.5. MOVABLE SHIELD (MULE)

A. A substantially and safely constructed moveable shield or box, as approved by the Engineer, may be used in place of sheeting except where it is specifically called out on the Plans or in the Specifications to install sheeting. When using a shield, the trench is opened immediately ahead of the shield as pipe laying proceeds inside the shield. All construction in conjunction with using such a shield must be as approved by the Engineer, including excavation, installation of pipe, and backfilling and compaction. When a moveable shield or box is used, the installed pipe shall be secured to prevent it from moving when the box is moved.

3.0.6. TRENCH OVERCUT

A. Trench overcut provisions herein shall be used only under direct authorization by the Engineer.

B. If, after excavating the trench to a depth of 2 feet 6 inches below the outside bottom elevation of the proposed pipe barrel, and the soil at that depth is still unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, and the Engineer authorizes overcut, the pipe trench shall be excavated further in one (1) foot increments until either a suitable foundation material is found, or the Contractor is directed by the Engineer to stop trench overcut operation

and begin backfilling. In no case will trench overcut be more than 6 feet in depth, i.e., to a point 8 feet 6 inches below the bottom of the pipe.

C. Selected backfill, as defined in 2.0.1. "Materials" shall then be compacted in 6-inch layers up to the bottom of the proposed 6 inches of pipe bedding.

3.0.7. DEWATERING

A. It is a basic requirement of these Specifications that excavation shall be free from water before pipe or structures are installed. The Contractor shall refer to 3.0.12. "Alternate Method of Construction" below.

3.0.8. TRENCH RESTORATION

A. Trench restoration shall be per the applicable of Miami Dade County Standard Details, firstly, and FDOT if not specified.

B. Mill and resurface minimum 1 inch in accordance with the restoration limits in Part 1 or as directed by the City of Opa-Locka Public Works Department. Prior to placing pavement, City Public Works inspection is required. If milled section crosses a pedestrian path or temporary pedestrian path/detour, an asphalt apron must be provided at transitions with all adjacent surfaces within the pedestrian crossing.

C. Where cuts have been made through unpaved, stabilized rock roadways, driveways and parkways, surface restoration shall consist of 3 inches of compacted limerock overlaid by 3 inches of gravel or graded and washed rock with a maximum diameter of ½ inch, except as otherwise directed by the City or designee. The rock shall be installed over the entire width of the disturbed area and shall closely match the existing rock at each location. Several grades of rock may be required to attain this end, but it is not anticipated that more than one grade will have to be used at any one location.

3.0.9. TEMPORARY PAVEMENT

A. Temporary paving will be required along the entire route where the original paved surface is removed. Unless otherwise approved by the City or designee, temporary paving shall be placed the same day the trench is backfilled. The trench shall be backfilled up to a level 1 inch below the existing pavement surface and a temporary, cold mixed sand/asphalt pavement shall be constructed up to the level of the existing pavement surface. The liquid asphalt shall be Grade RC-70, conforming to the requirements of FDOT Specifications, Section 916-2. The sand shall conform to the requirements of FDOT Specifications, Section 902 for fine aggregate.

B. The cold mix is to be installed one block at a time, not crossing any intersection, or a maximum of 1,200 feet shall be completed before the Contractor may move forward

with This excavation Work. Backfill, compaction and temporary paving is to keep pace with the pipe installation. Written permission must be obtained from the City of OpaLocka Public Works Department to allow lengths greater than 1,200 feet. At the sole discretion of the City of Opa-Locka Public Works Department, the allowable limits in the permit may be reduced due to unforeseen right-of-way conditions.

C. The temporary pavement shall be maintained by the Contractor in a condition satisfactory to the City or designee until its removal. Removal shall include any surplus backfill material. Replacement of the temporary pavement with permanent pavement shall be made within 30 days. In replacing the temporary paving with permanent pavement, all Work shall be completed in sections compatible with specified traffic maintenance procedures.

D. The Contractor may elect to install a suitable temporary hot mix asphaltic pavement to be left in-place, in lieu of cold mix, when the hot mix asphalt is left in-place and installed over properly compacted limerock base course. This temporary pavement shall be incorporated into the specified permanent pavement restoration as part of paving restoration.

E. Sand seal on the limerock base course will not be permitted in lieu of temporary paving.

F. Unless otherwise approved by the City or designee, temporary paving shall be placed within twenty-four (24) hours following the completion of backfilling.

G. If temporary asphalt is utilized, it shall be removed prior to placement of final asphalt surface.

H. Temporary restoration requires field approval by City of Opa-Locka Public Works Department Field Inspector

3.0.10. STOCKPILED MATERIALS

A. Stockpile excavated material that is suitable for use as fill or backfill until material is needed.

B. Material suitable for backfill and not needed for backfill at the structure shall be stockpiled and later moved where needed.

C. Materials shall be stored and in such a manner that will not interfere unduly with City operations, traffic at the site, traffic on public roadways, or sidewalks and shall not be placed on private property. In congested areas, such materials that cannot be stored adjacent to the trench or used immediately as backfill shall be removed to other convenient places of storage acceptable to the City or designee at the Contractor's expense.

D. Post signs indicating proposed use of material stockpiled. Post signs that are readable from all directions of approach to each stockpile. Signs should be clearly worded and readable by equipment operators from their normal seated position.

E. Confine stockpiles to within easements, right-of-way, and approved Work areas. Do not obstruct road or streets.

F. Do not stockpile excavated material adjacent to trenches and other excavations unless excavation side-slopes and excavation support systems are designed, constructed, and maintained for stockpile loads.

G. Do not stockpile excavated materials near or over existing facilities, adjacent property, or completed Work if weight of stockpiled material could induce excessive settlement.

H. Do not place stockpiles within 50 feet of inlets, streams, wetlands, bodies of water, etc. unless permitted by the City or designee.

I. Stockpile side slopes shall be no steeper than 3 horizontal : 1 vertical unless approved by the City or designee. Top of stockpile shall have a minimum slope of no less than 5% to promote positive drainage.

J. Provide perimeter erosion control measures around stockpiles, located no closer than 5- feet from toe of slope, and stabilized stockpile surface with temporary seeding or other measures if stockpile will remain inactive for more than seven (7) days.

3.0.11. BACKFILL

A. Place and compact granular bedding and fill over pipelines and conduits. Density tests for determination of the specified compaction shall be made by a testing laboratory approved by the City or designee. Testing of compacted fill materials is required in accordance with these Specifications. If results of tests taken during the progress of the Work indicate compacted materials do not meet specified requirements, such defective Work will be removed, replaced, and re-tested as directed by the City or designee and at the Contractor's sole expense. Compacted fill is to be tested before proceeding with the placement of surface materials.

B. Backfilling of pipe trenches will not be allowed until the Work has been approved by the City or designee, pressure tested if required, and the City or designee indicates that backfilling may proceed. Any Work which is covered or concealed without the knowledge and consent of the City or designee shall be uncovered or exposed for inspection. Partial backfill may be made to help restrain the pipe during pressure testing, if previously authorized by the City or designee.

C. The Contractor shall backfill all trenches and other excavations made in the process of installing the culvert. The Contractor shall maintain the surface of the backfill free from major irregularities and potholes.

D. The Contractor shall maintain trenches free of debris, wood, rocks over 2 inches in diameter, and water.

E. Backfill shall be in accordance with the Culvert Pipe Manufacturer's Standard Details, firstly, and FDOT if not specified. Material shall be placed in maximum 6-inch layers. Each layer shall be thoroughly compacted to at least 98% of maximum density as defined by AASHTO Specifications T-180. The material in the ditch may be compacted by either hand tamper or a mechanized power tamper, provided the results meet the requirements and are approved by the City or designee. Care shall be taken to preserve the alignment and gradient of the installed pipes.

F. A testing laboratory will make periodic field tests to determine the density being obtained in each lift of backfill. Testing shall be performed at a minimum frequency of one test every 10 feet. When compacted backfill fails to meet the specified percentage of maximum density as shown by test results, it shall be reworked and recompacted, and then retested. The reworking, recompacting, and retesting of the backfill shall be repeated as many times as may be necessary to obtain compacted backfill with density meeting or exceeding the specified percentage as indicated by test results.

G. The Contractor shall exercise proper care to ensure no pipe will be broken or displaced by use of mechanical compacting equipment. Water shall be added as required to obtain optimum moisture content to facilitate compaction but ponding or inundation of backfill will not be permitted.

H. In the event sufficient suitable material is not available at any point to properly backfill the trench, the Contractor shall transport suitable material from points of the line where such material is available or shall otherwise furnish suitable material.

3.0.12. ALTERNATE METHOD OF CONSTRUCTION

A. A combination of conditions in the substrata, water table, method of disposal or regulatory agency requirements may be encountered during the course of the work which makes dewatering impossible, or possible only through the use of unusual methods, the cost of which is excessive. When such conditions are encountered, but only after all reasonable means to dewater the excavation have been employed without success, the Contractor may request permission to employ the following Alternate Method of Construction. The concurrence of the Engineer shall be obtained in writing and shall limit the use of the Alternate Method of Construction to such specific portions of the work as the Engineer shall determine.

B. The requirements set forth in other Sections of these Specifications shall establish the required standards of construction quality for this work. Use of the Alternate Method

of Construction described hereinafter shall in no way be construed as relieving the Contractor of his basic responsibility for satisfactory completion of the work.

C. Under no conditions will any additional or increased payments be made to the Contractor for excavation, backfill, sheeting or any cost incurred for work or materials, or any other costs incurred as a result of the use of this alternate method of construction. The unit prices established in the Quotation shall be full payment for the various items of work.

D. Subject to all of the requirements stated herein, including written approval of the Engineer, construction will be permitted in accordance with the following specifications. All requirements of these Specifications shall apply to this construction unless otherwise specifically modified herein.

1. Removal of Water: The installation of pipe and appurtenances under water will be permitted and the dry-trench requirements of Section 6.06 "Removal of Water" will be waived.

2. Excavation: Excavation shall be performed in accordance with 3.0.2. "Excavation."

3. Pipe Bedding:

   a. Pipe bedding shall be placed from 6 inches below the outside bottom of the proposed pipe barrel up to the level of the lower one-third of the pipe barrel for pressure mains.

   b. The bedding material shall be pea rock, or drainfield limerock. Limerock screenings, sand or other fine organic material shall not be used.

   c. The bedding material shall be tamped and graded to provide a proper bedding for the pipe and shall then be shaped to receive the pipe. Bedding shall be provided under the branch of all fittings to furnish adequate support and bearing under the fittings.

4. Backfill:

   b. After the pipe is installed, backfilling shall proceed in accordance with the provisions of 2.0.1. "Materials"

   c. Select backfill material shall be used to backfill around the pipe and to a level one (1) foot above the crown of the pipe.

d. Under no circumstances will material other than select backfill or specified pipe bedding material be considered satisfactory for this purpose.

E. If the Alternate Method of Construction is used, all backfill material, including specified pipe bedding material, shall be carefully lifted into the trench and not released to fall freely therein until the bucket or container is at or just above water level. Under no circumstances will backfill material be dumped or pushed into trenches containing water. Below existing water level, and to a point not more than 18 inches above the water level the backfill material shall be carefully placed in uniform layers, of equal depth on each side of the pipe. From a point not more than 18 inches above the water level, and below the pavement base or the surface of the ground, if out of paved areas, backfill material shall be placed and compacted for normal backfilling as provided in 2.0.1. "Materials" for compacted backfill.

END OF SECTION

02371 RIP-RAP

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Construct riprap composed of sand-cement or rubble (consisting of broken stone or broken concrete) as shown in the Standard Plans and in the Plans.

PART 2 – PRODUCTS 2.0.1.

FILTER FABRIC

A. Use products listed on the FDOT's APL.

B. Schedule work so that covering the fabric with the specified material does not exceed the manufacturer's recommendations for exposure to ultraviolet light or five days, whichever is less. If the Engineer determines the exposure time was exceeded, the Contractor shall replace the fabric at no expense to the City.

C. Place the filter fabric (fabric) at locations as shown in the Plans, in accordance with the manufacturer's directions. Place the fabric on areas with a uniform slope that are reasonably smooth, free from mounds, windrows, and any debris or projections which might damage the fabric.

D. Loosely lay the material. Do not stretch the material. Replace or repair any fabric damaged or displaced before or during placement of overlying layers. Repair in accordance with the manufacturer's instructions.

E. The Contractor may sew the seams to reduce overlaps as specified in 985-3. Follow the manufacturer's instructions for all seams and overlaps.

2.0.2. PREPACKAGED SAND-CEMENT BAGS

A. Evenly proportioned sand and cement in the ratio of five cubic feet of sand to 94 pounds of cement. Material proportioned by mass shall use a sand density of 85 pounds per cubic foot.

B. Sealed package of 80 pounds of sand-cement in a bag.

C. Bag made of scrim-reinforced paper capable of holding the sand-cement without leakage.

D. Sand meets requirements of Section 902-3.3

E. Type I/II cement meets requirements of Section 921.

F. Prepackaged Sand-Cement Bags shall be one of the products listed on the FDOT's Approved Product List. Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6. Include with the submittal a product data sheet, safety data sheet, product label, and a self-certified statement the product meets the requirements of this Section.

2.0.3. RUBBLE

A. Rubble (Bank and Shore Protection):

1. Provide sound, hard, durable rubble, free of open or incipient cracks, soft seams, or other structural defects, consisting of broken stone with a bulk specific gravity of at least 2.20. Ensure that stones are rough and angular.

2. For this application, use broken stone meeting the following gradation and thickness requirements:

Weight Maximum Pounds	Weight 50% Pounds	Weight Minimum Pounds	Minimum Blanket Thickness in Feet

670	290	60	2.5
Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds]. Ensure that at least 50% of the material by weight is greater than Weight 50% pounds]. Ensure that at least 85% of the material by weight is greater than Weight Minimum pounds.			

B. Rubble (Ditch Lining):

1. Use sound, hard, durable rubble, free of open or incipient cracks, soft seams, or other structural defects, consisting of broken stone or broken concrete with a bulk specific gravity of at least 1.90. Ensure that stones or broken concrete are rough and angular.

2. Use broken stone or broken concrete meeting the following gradation and thickness requirements:

Weight Maximum Pounds	Weight 50% Pounds	Weight Minimum Pounds	Minimum Blanket Thickness in Feet
75	30	4	1.5
Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds]. Ensure that at least 50% of the material by weight is greater than Weight 50% pounds]. Ensure that at least 90% of the material by weight is greater than Weight Minimum pounds.			

C. Physical Requirements of Broken Stone and Broken Concrete:

1. Use broken stone and broken concrete meeting the following physical requirements:

Absorption (FM 1-T 85)	Maximum 5%
Los Angeles Abrasion (ASTM C535)	Maximum loss 45%*
Soundness (Sodium Sulphate) (AASHTO T 104)	Maximum loss 12%** (after five cycles)
Flat and elongated pieces	Materials with least dimension less than one third of greatest dimension not exceeding 10% by weight.
Dirt and Fines	Materials less than 1/2 inch in maximum dimension accumulated from interledge layers, blasting or handling operations not exceeding 5% by weight.

Drop Test***(EM 1110-2-2302)	No new cracks developed, or no existing crack widened additional 0.1 inch, or final largest dimension greater than or equal to 90% original largest dimension of dropped piece.

* Ensure that granite does not have a loss greater than 55% and that broken concrete does not have a loss greater than 45%.

** The Engineer may accept rubble exceeding the soundness loss limitation if performance history shows that the material will be acceptable for the intended use. The Engineer will waive the soundness specification for rubble riprap (broken stone) when project documents indicate it will be placed in or adjacent to water or soil with a sulfate content less than 150 parts per million and a pH greater than 5.0. Soundness is not required for broken concrete.

*** The Engineer will waive the Drop Test unless required to ensure structural integrity. Provide all equipment, labor and testing at no expense to the City. EM refers to the US Army Corps of Engineer's Specification Engineering Method.

PART 3 – EXECUTION 3.0.1.

GEOTEXTILE FABRIC

A. Overlap adjacent strips of fabric a minimum of 24 inches, and anchor them with securing pins (as recommended by the manufacturer) inserted through both strips of fabric along a line through the midpoint of the overlap and to the extent necessary to prevent displacement of the fabric.

B. Place the fabric so that the upstream (upper) strip of fabric overlaps the downstream (lower) strip.

C. Stagger vertical laps a minimum of 5 feet. Use full rolls of fabric whenever possible in order to reduce the number of vertical laps.

D. Do not drop bedding stone or riprap from heights greater than 3 feet onto the fabric.

3.0.2 SAND-CEMENT BAGS

A. Place the bags with their ends all in the same direction. Lay the bags with broken joints, in a regular pattern. Ram or pack the bags against each other so as to form a close and molded contact. Remove and replace bags ripped or torn in placing with sound, unbroken bags. Then, thoroughly saturate all bags with water.
B. Immediately after watering, fill all openings between bags with dry grout composed of onepart Portland cement and five parts sand.
C. Use sand-cement bags for the toe walls if required. Fill the entire trench excavated for the toe walls with sand-cement bags.

3.0.3. RUBBLE

A. Dump rubble in place forming a compact layer conforming to the neat lines and thickness specified in the Plans. Ensure that rubble does not segregate so that smaller pieces evenly fill the voids between the larger pieces.

02510 ASPHALTIC CONCRETE PAVEMENT

PART 1 – GENERAL

1.0.2. SCOPE OF WORK

A. Construct asphaltic concrete pavement in accordance with the lines, grades and typical sections as indicated on the drawings, specified herein and as required for a complete installation.

B. Replace and / or repair all existing asphaltic concrete pavement areas impacted by Contractor operations, including trenching for new utilities, as well as damage that may result from Contractor operations during the progress of the work.

C. Temporary asphalt / trench repairs shall be installed within 1 week of excavation and backfill work on plant roadways impacted by construction.

1.0.3. SUBMITTALS

A. The Contractor shall submit its proposed formulae for the asphaltic concrete paving for review in accordance with the Section 01300 "Submittals".

1.0.4. QUALITY CONTROL

A. Work shall be performed in accordance with Contract Documents, Drawings, and/or City of Opa-Locka Public Works Manual Specifications and Standard Details, in a neat and accurate manner. It is the intent of the City to obtain a complete and working installation according to these Specifications, and any items of labor, equipment, or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the project plans or stated herein.

B. Asphalt Acceptance Standards: The following minimum defects identified by the City or designee must be covered by warranty (but not limited to):

1. Sunken pavement patches greater than or equal to one-quarter (¼) inch (measured by a twelve (12) foot straight edge).

2. Surface raveling or oxidation due to deficiencies with the asphalt material.

3. Poor workmanship.

4. Inadequate compaction per Standards and Specifications.

1.0.5. RESTORATION LIMITS

A. At a minimum, sidewalk, curb, gutter, and roadway restoration shall be in accordance with the requirements of the agencies having jurisdiction including but not limited to City of Opa-Locka, Miami-Dade County, and FDOT.

B. The Contractor is responsible to restore the full lane width of two-lane roads when a trench is longitudinally cut within a lane. If the cut is in between two lanes, the Contractor is responsible to restore both lanes. If the cut impacts multiple lanes, all lanes impacted shall be restored. When a perpendicular cut is made crossing the pavement, a minimum of 25 feet width on each side of the cut, or to the intersection, must be restored by milling and resurfacing. For new developments, the Contractor shall restore the pavement from property line to property line.

C. At a minimum, the width of all asphalt repairs within the Work area shall extend at least 12 inches beyond the limit of the damage. Where the line for repaving for trenches extends 12-inches into the edge of the existing paving, repaving shall be to this edge only. Damage by the Contractor to the pavement beyond 12-inches into the edge of the existing paving will require the full lane be repaved.

D. The edge of the pavement shall be cut to a true edge with a saw or other acceptable method so as to provide a clean edge to abut the repair. The line of the repair shall be uniform with no irregularities. Repair of damage by the Contractor beyond the Work area shall be approved by the City or designee prior to commencing the Work.

E. Any base course or surface course beyond the restoration limits, damaged as a result of the Contractor's operation, shall be restored in accordance with the applicable requirements of these Specifications, to the satisfaction of the City or designee.

F. Permanent pavement repair shall be with edges straight and parallel and patches rectangular in plan. Replace any paving, beyond the limits shown in the details and as called for in the Specifications, as required. Where trenches are located out of the

existing pavement and damage occurs to the pavement, that pavement shall also be replaced by the Contractor.

G. Five Year Moratorium Directive from City: If the road is under Moratorium, the Contractor is to restore the entire roadway width.

H. Final asphalt application requires milling and resurfacing full travel lanes or as directed by City of Opa-Locka Public Works Department Field Inspector.

PART 2 – PRODUCTS 2.0.12.

MATERIALS

A. Subbase: Limit gradation of the material within the limits of the area being stabilized to 97% passing 3½-inch sieve. Soil shall be clean, non-deleterious material. Subbase material supporting the roadway and shoulders shall have a minimum LBR of 40. The stabilized subbase shall be 12 inches, placed in maximum compacted lift thickness of 8- inches, and compacted to 98% of maximum dry density as per AASHTO T-180.

B. Limerock Base Course

1. The material used in limerock base courses shall be material classified as either Miami Oolite Formation or Ocala Formation at the Contractor's option having a minimum of 70% calcium carbonate or magnesium carbonate; however, only one formation may be used on any contract.

2. Limerock base course shall have a minimum LBR of 100. Limerock base shall be twice the thickness of the existing adjacent base and shall be minimum of 12inches thick and a maximum of 18-inch thick, placed in 6-inch lifts. Base material shall be compacted to a density of not less than 98% of maximum dry density as per AASHTO T-180 under all paved areas.

3. The limerock material shall contain no more than 0.5% of organic material or objectionable matter and shall show no significant tendency to air slake or undergo any chemical under exposure to weather.

4. The maximum percentage of water sensitive clay material shall be three percent (3%).

5. At least 97% (by weight) of the material shall pass a 3½-inch sieve, and the material shall be graded uniformly down to dust. The fine material shall consist entirely of dust of fracture. All crushing or breaking up which might be necessary

in order to meet such size requirements shall be done before the material is placed on the road.

6. The limerock material shall be uniform in quality and shall not contain cherty or other extremely hard pieces, lumps, balls or pockets of sand or clay size material in sufficient quantity as to be detrimental to prevent proper bonding, finishing, or strength of the limerock base.

7. Limerock material shall be non-plastic, and the liquid limit shall not exceed 35.

C. Asphaltic Concrete

1. Bituminous Material: Asphalt cement, Viscosity Grade AC-20 or AC-30, shall conform with the requirements of FDOT Specifications, Section 916-1.

2. Coarse Aggregate: Coarse aggregate, stone or slag shall conform to the requirements of the FDOT Specifications, Section 901.

3. Fine aggregate: Fine aggregate shall conform to the requirements of FDOT Specifications, Section 902.3.

4. Mineral Filler: Mineral filler shall conform to the requirements of FDOT Specifications, Section 917-1 and 917-2.

5. Prime Coat: Unless otherwise indicated, the material used for the prime coat shall be cutback asphalt, Grade RC-70 or RC-250, and shall conform with the requirements specified in AASHTO Destination M 81. Unless otherwise indicated, the use of wither RC-70 or RC-250 shall be at the Contractor's option.

6. Tack Coat: The material used for the tack coat shall be Emulsified Asphalt, Grade RS-2 and shall conform with the requirements specified in AASHTO Designation M 140.

7. Where Type S Asphalt Concrete is specified in the Contract Documents, if approved by the City or designee, the equivalent fine Type SP Asphalt Concrete mixture (Traffic Level C) meeting the requirements of FDOT Specifications Section 334 may be selected as an alternate at no additional cost to the City or Owner. The equivalent mixes are as follows:

Type S-I.....Type SP-12.5 Type
S-II.....Type SP-19.0 Type
S-III.....Type SP-9.5

2.0.13. TEXTURED PAVEMENT

A. "StreetBond SP150E Coating Material" refers to a high-performance premium coating material consisting of epoxy modified acrylic polymers blended with sand and aggregate, and specially formulated by GAF, Inc. (Tel. 1-800-766-3411), for application on asphalt surfaces to provide a durable, long lasting color and texture to the asphalt surface.

B. "StreetBond Colorant" is a highly concentrated, high quality, UV stable pigment blend designated to be added to StreetBond SP150E coating system to provide color to the coating. The colors to be used shall be shown on the Drawings. The same StreetBond Colorant shall be used in each SP150E coating layer to the asphalt surface. One pint of colorant shall be used with one pail of StreetBond coating material.

C. Use only patterned/textures pavement products listed on the Qualified Products List (QPL). Meet manufacturer's Specifications for all pattern/texture templates, coating, and coloring material. Use only material that is delivered to the job site in sealed containers bearing the manufacture's original labels. Material coating used to achieve the pattern/texture and/or color shall produce an adherent, weather resistant, skid resistant surface capable of resisting deformation to traffic. Paint and thermoplastic material must meet the requirements of this Specifications and FDOT Specifications Section 971, except that the requirements for Color and Retroreflectivity do not apply.

D. Manufacturers seeking approval for inclusion on the QPL must submit application and certifications in accordance with FDOT Specifications Section 6 along with the following documentation:

1. Manufacturer's Specifications and procedures for materials and installation.

2. Manufacturer's certification with supporting test data and results that the patterned/textured pavement installed in accordance with the manufacturer's Specifications and procedures has been tested in accordance with the ASTM E274, Skid Resistance of Paved Surfaces using a standard ribbed full-scale tire at a speed of 40 mph (FN40R) and has a minimum FN40R value of 35.

PART 3 – EXECUTION

3.0.1. INSTALLATION OF ASPHALT

A. General

1. Pavement markings removed or obliterated by the Contractor's operations shall be promptly replaced, in kind, to the satisfaction of the City of Opa-Locka Department of Public Works, Traffic Engineering Division or designee.

2. At least three density determinations shall be made on each day's final compaction operations on each course, and the density determinations shall be made at more frequent intervals if deemed necessary by the City or designee.

B. Subbase: Roadway subbase shall be stabilized to the minimum depth shown on the Drawings to a LBR not less than 40. Stabilizing shall be type C as defined in Section 160 of the FDOT specifications. Stabilization may require the addition and thorough mixing in of crushed limerock, coarse limerock screenings, or any other stabilizing material acceptable to the City or designee. The stabilizing material shall be applied in such quantity that, after mixing and blending, the subbase will have a LBR not less than 40. Stabilizing material shall be mixed or blended in the subbase material by plowing, scarifying, disking, harrowing, blading, and mixing with rotary tillers until the mixed materials are of uniform bearing ratio throughout the width and depth of the layer being processed. The minimum acceptable density at any location will be 98% of maximum dry density as determined by AASHTO T-180.

C. Limerock Base: The limerock base shall be constructed in accordance with Section 200 of the FDOT Specifications, to the thickness and width indicated on the Drawings. Pavement base shall be constructed in maximum 6-inch lifts.

D. After spreading of the base material is completed, the entire surface shall be scarified and shaped so as to produce the exact grade and cross section after compaction. For double course base, this scarifying shall extend a depth sufficient to penetrate slightly the surface of the first course. The maximum depth of each lift shall be 6-inches.

E. When the material does not have the proper moisture content to ensure the required density, wetting or drying shall be required. If the material is deficient in moisture, water will be added and uniformly mixed in by disking the base course to its full depth. If the material contains an excess of moisture, it shall be allowed to dry before being compacted. Wetting and drying operations shall involve manipulation of the entire width and depth of the base as a unit. As soon as proper conditions of moisture are attained, the material shall be compacted to an average density not less than 98% of maximum dry density as determined by AASHTO T-180. Where the base is being constructed in more than one course, the density shall be obtained in each lift of the base.

F. During final compacting operations, if blading of any areas is necessary to obtain the true grade and cross section, the compacting operations for such areas shall be completed prior to making the density determination on the finished base.

G. Unless otherwise directed by the City or designee, the surface shall be "hard-planed" with a blade grader immediately prior to the application of the prime coat to remove the thin glaze or cemented surface and to allow free penetration of the prime material. The materials planed from the base shall be removed from the base area.

H. If cracks or checks appear in the base, either before or after priming, which in the opinion of the City or designee, would impair the structural efficiency of the base course, the Contractor shall remove such cracks or checks by re-clarifying, reshaping, adding base material where necessary and re-compacting, at no additional cost to the City or Owner.

I. Mixing Base and Subbase: If at any time the subbase material shall become mixed with the base course material, the Contractor shall, without additional compensation, dig out and remove the mixture, reshape and compact the subbase and replace the materials removed with clean base material, which shall be shaped and compacted as specified above.

J. Prime Coat: The prime coat shall be applied at a rate of 0.15 gallons per square yard and the work performed in accordance with Section 300 of the FDOT Specifications.

K. Asphaltic Concrete: The spreading, compacting, and jointing the wearing surface shall be in accordance with Sections 330 and 333 of the FDOT Specifications to the thickness indicated on the Drawings.

L. Tack Coat: Apply tack coat at a rate between 0.02 and 0.10 gallons per square yard and perform the Work in accordance with Section 300 of the FDOT Specifications.

M. Connections with Existing Facilities Where the bituminous pavement is to be connected with an existing roadway surface or other facility, the Contractor shall modify the existing roadway profile in such a manner as to produce a smooth riding connection to the existing facility. Where it is necessary to remove existing asphalt surfaces to provide proper meet lines and riding surfaces, the Contractor shall saw cut the existing surface so that there will be sufficient depth to provide a minimum of 1inch of asphalt concrete, and the waste material shall be disposed of to the satisfaction of the City or designee. Prior to placing the asphalt concrete, these areas shall be tacked. Meet lines shall be straight and the edges vertical. The edges of meet line cuts shall be painted with liquid asphalt or emulsified asphalt prior to placing asphalt concrete. After placing the asphalt concrete, the meet line shall be sealed by painting with a liquid asphalt or emulsified asphalt and immediately covered with clean, dry sand.

N. Surface Tolerance

1. Tests for conformity with the specified grade shall be made immediately after initial compression. Any variation shall be immediately corrected by the removal or addition of materials and by continuous rolling. The completed surface of the pavement shall be of uniform texture, smooth, uniform as to grade, and free from defects of all kinds.

2. The completed surface shall not vary more than 1/8 inch from the lower edge of a 12-foot straightedge placed on the surface along the centerline or across the trench.

3. After completion of the final rolling, the smoothness and grade of the surface shall again be tested by the Contractor.

4. When deviations in excess of the above tolerances are found, the pavement surface shall be corrected as stated in Section 330-12.4 of the FDOT Specifications.

5. All areas in which the surface of the completed pavement deviates more than twice the allowable tolerances described above shall be removed and replaced to the satisfaction of the City or designee.

O. Weather Conditions: Asphalt shall not be applied to wet material. Asphalt shall not be applied during rainfall or any imminent storms that might adversely affect the construction. The Engineer will determine when surfaces and materials are dry enough to proceed with construction. Asphalt concrete shall not be placed during heavy rainfall or when the surface upon which it is to be placed is wet.

P. Protection of Structures and Adjustment of Appurtenances

1. Provide whatever protective coverings may be necessary to protect the exposed portions of bridges, culverts, curbs, gutters, posts, guard fences, road signs, and any other structures from splashing oil and asphalt from the paving operations. Remove any oil, asphalt, dirt, or any other undesirable matter that may come upon these structures by reason of the paving operations.

2. Where water valve boxes, manholes, catch basins, or other underground utility appurtenances are within the area to be surfaced, the Contractor shall adjust the covers of these improvements to conform to the proposed surface elevations.

3. In this effort, the Contractor shall be responsible for ensuring that appurtenances are brought to proper grade to conform to the finished surface elevations and any delays experienced from such obstructions will be considered as incidental to the paving operation. No additional payment will be made. Protect all covers during asphalt application.

Q. Pavement Warranty: Settlement of replaced pavement over trenches within the warranty period shall be considered the result of improper or inadequate compaction of the subbase or base materials. The Contractor shall promptly repair all pavement deficiencies noted during the warranty period at the Contractor's sole expense.

R. The pressure distributor used for placing the tack or prime coat shall be equipped with pneumatic tires having sufficient width of rubber in contact with the road surface to avoid breaking the bond of or forming a rut in the surface. The distance between the centers of openings of the outside nozzles of the spray bar shall be equal to the width of the application required, within an allowable variation of 2-inches. The outside nozzle at each end of the spray bar shall have an area of opening of not less than 25 percent, nor more than 75 percent in excess of the other nozzles which shall have uniform openings. When the application covers less than the full width, the normal opening of the end nozzle at the conjunction line may remain the same as those of the interior nozzles.

S. Application Temperatures: For asphalt cement Viscosity Grade AC-5, the application temperature shall be between 300 degree and 350 degree F; for emulsified asphalt, between 100 degrees and 170 degrees F; and for cut-back asphalt, between 175 degree and 275 degree F.310-9.3 Uniformity of Distribution: Special precautions shall be observed to assure that an even and uniform distribution of bituminous material will be obtained, and the distributor shall be so adjusted and operated as to maintain uniform, even distribution of the type of material being applied. Excessive deposits of bituminous material upon the road surface caused by stopping or starting the distributor, by leakage or otherwise, shall be immediately removed.

T. When the prime or tack coat is applied adjacent to curb and gutter, or any other concrete or special pavement surface (except where they are to be covered with a bituminous wearing course) such concrete surfaces shall be protected by heavy paper or other protective material while the prime or tack coat is being applied. Any bituminous material deposited on such concrete surfaces shall be removed immediately.

U. No bituminous material shall be applied when the air temperature is less than 50 degree in the shade, or when the weather conditions or the condition of the existing surface is unsuitable. In no case shall bituminous material be applied while rain is falling or when there is water on the surface to be covered.

V. After the base has been finished, the full width of surface shall be swept with a power broom supplemented with hand brooms and mechanical blowers prior to the application of the prime coat. Care shall be taken to remove all loose dust, dirt and objectionable matter. If deemed necessary, the base shall be lightly sprinkled with water immediately in advance of the prime coat. The prim coat shall be applied to the full width of the base.

W. The temperature of the prime material shall be such as to insure uniform distribution. The material shall be applied with a pressure distributor as specified above. The amount to be applied shall be sufficient to coat the surface thoroughly and uniformly without any excess to form pools or to flow off the base. For lime rock base, the rate of application shall not be less than 0.10 gallons per square yard.

X. The roadway may be opened for use following the application of the prime material, and a light uniform application of clean sand shall be applied and rolled. The sand shall be non-plastic, shall be free from silt rock particles and shall not contain any sticks, vegetation, grass, roots or organic matter. After the sand covering has been applied, the surface will be opened to traffic.

Y. Asphalt Densities: The in place density of each course of asphalt mix construction, with the exceptions of patching courses, leveling and intermediate course less than one-inch thick or a specified spread rate less than 100 pounds per square yard, overbuild courses where the minimum thickness is less than one-inch, and opengraded friction course, shall be determined by the use of the Nuclear Density Backscatter Methods as specified by FM 1-T238 (method B). The required density of a completed course shall be at least 98 percent of the average density of the control strip.

3.0.2. INSTALLATION OF TEXTURED PAVEMENT

A. Applications of textured pavement include the following. Imprinting patterns into existing or new pavement and covering with a surface coating(s) of paint or thermoplastic. Imprinting patterns into existing or new pavement and inlaying the imprint with performed thermoplastic material. Colored, preprinted, preformed texturized thermoplastic material that is applied over existing pavement. Colored thermoplastic material that can be imprinted and texturized during or after application to existing pavement.

B. Patterns are defined as visible surface markings. Imprinted textures are defined as palpable surface markings.

C. Use the location, pattern/texture type (brick, stone, etc.) and coating color as specified in the Plans. Joint openings shall not exceed ½ inch in width.

D. Apply a patterned and/or textured treatment to asphalt or concrete in accordance with manufacturer's recommendations.

E. For application requiring removal and replacement of existing pavement, meet the requirements of FDOT Specifications Section 350 for cement concrete pavement; the requirements of Section 334 for Superpave asphalt or Section 337 for FC 9.5 and FC 12.5 asphalt.

F. Protect treated surfaces from traffic and environmental effect until the area is completely coated/imprinted and any coating have dried or cured according to the manufacturer's instructions. Complete all utility, traffic loop detector, and other items requiring a cut and installation under the finished surface, prior to pattern installation.

For asphalt roadways, apply patterned/textured pavement a minimum of 14 days after placement of the adjacent pavement. Upon completion of the installation, the City or designee will check the area at random location(s) for geometric accuracy, as specified in the plans. If any of the chosen areas have an imprint width and depth that is less than the manufacturer's specifications, correct the entire textured area, at no additional cost to the City. Supply the specified pattern and color sample for the Engineer's use to visually determine that the material matches the color specified in the plans. For any continuous or abutting areas, i.e., all treated areas of an intersection, color material must be from the same lot/batch. Provide certification that the textured pavement was installed in accordance with the manufacturer's requirements.

G. Textured pavement on crosswalks and travel lanes are to be tested for skid resistance in accordance with ASTM E303.

3.0.3. TEMPORARY TRENCH REPAIR OR STABILIZATION

A. Following trenching and backfill within active plant roadways, but prior to final asphalt replacement at substantial completion, the Contractor shall install temporary trench repair, consisting of compacted base course and temporary asphalt.

B. Temporary trench repair shall include the preparation of the subgrade, the placing and compacting of the lime rock base, the priming of the base, the placing and maintaining of the surface treatment, all as specified herein.

C. The width of trench repairs shall extend at least 12 inches each side beyond the limits of the asphalt impacted by excavation. The edge of the pavement to be left in place shall be cut to a true edge with a saw or other approved method so as to provide a clean edge to abut the repair. The line of the repair shall be reasonably uniform with no unnecessary irregularities.

3.0.4. PAVEMENT MARKINGS

A. All existing markings (i.e., lanes, edge of pavement, parking stalls, etc.) impacted by the Contractor during construction shall be replaced with new painted items in accordance with the requirements of Section 971 of the FDOT Specifications.

3.0.5. CONNECTIONS WITH EXISTING FACILITIES

A. Where the bituminous pavement is to be connected with an existing roadway surface or other facility, the Contractor shall modify the existing roadway profile in such a manner as to produce a smooth riding connection to the existing facility.

B. Where it is necessary to remove existing asphalt surfaces to provide proper meet lines and riding surfaces, the Contractor shall saw cut the existing surface so that there will be sufficient depth to provide a minimum of 1-inch of asphalt concrete, and the waste

material shall be disposed of to the satisfaction of the Engineer. Prior to placing the asphalt concrete, these areas shall be tacked. Meet lines shall be straight and the edges vertical. The edges of meet line cuts shall be painted with liquid asphalt or emulsified asphalt prior to placing asphalt concrete. After placing the asphalt concrete, the meet line shall be sealed by painting with a liquid asphalt or emulsified asphalt and immediately covered with clean, dry sand.

3.0.6. SURFACE TOLERANCE

A. Tests for conformity with the specified grade shall be made immediately after initial compression. Any variation shall be immediately corrected by the removal or addition of materials and by continuous rolling.

B. The completed surface of the pavement shall be of uniform texture, smooth, uniform as to grade, and free from defects of all kinds. The completed surface shall not vary more than 1/8 inch from the lower edge of a 12-foot straightedge placed on the surface along the centerline or across the trench.

C. After completion of the final rolling, the smoothness and grade of the surface shall again be tested by the Contractor.

D. When deviations in excess of the above tolerances are found, the pavement surface shall be corrected as stated in Section 330-12.4 of the FDOT Specifications.

E. All areas in which the surface of the completed pavement deviates more than twice the allowable tolerances described above shall be removed and replaced to the satisfaction of the Engineer.

3.0.7. WEATHER CONDITIONS

A. Asphalt shall not be applied to wet material. Asphalt shall not be applied during rainfall or any imminent storms that might adversely affect the construction. The Engineer will determine when surfaces and materials are dry enough to proceed with construction. Asphalt concrete shall not be placed during heavy rainfall or when the surface upon which it is to be placed is wet.

3.0.8. PROTECTION OF STRUCTURES AND ADJUSTMENT OF APPURTENANCES

A. Provide whatever protective coverings may be necessary to protect the exposed portions of bridges, culverts, curbs, gutters, posts, guard fences, road signs, and any other structures from splashing oil and asphalt from the paving operations. Remove any oil, asphalt, dirt, or any other undesirable matter that may come upon these structures by reason of the paving operations.

B. Where water valve boxes, catch basins, or other underground utility appurtenances are within the area to be surfaced, the Contractor shall adjust the covers of these improvements to conform to the proposed surface elevations.

C. In this effort, the Contractor shall be responsible for ensuring that appurtenances are brought to proper grade to conform to the finished surface elevations and any delays experienced from such obstructions will be considered as incidental to the paving operation. No additional payment will be made. Protect all covers during asphalt application.

3.0.9. PAVEMENT WARRANTY

A. Settlement of replaced pavement over trenches within the warranty period shall be considered the result of improper or inadequate compaction of the sub-base or base materials. The Contractor shall promptly repair all pavement deficiencies noted during the warranty period at the Contractor's sole expense.

3.0.10. INSTALLATION OF TEXTURED PAVEMENT

H. Applications of textured pavement include the following.

22. Imprinting patterns into existing or new pavement and covering with a surface coating(s) of paint or thermoplastic.

23. Imprinting patterns into existing or new pavement and inlaying the imprint with performed thermoplastic material.

24. Colored, preprinted, preformed texturized thermoplastic material that is applied over existing pavement.

25. Colored thermoplastic material that can be imprinted and texturized during or after application to existing pavement.

I. Patterns are defined as visible surface markings. Imprinted textures are defined as palpable surface markings.

J. Use the location, pattern/texture type (brick, stone, etc.) and coating color as specified in the Plans. Joint openings shall not exceed ½ inch in width.

K. Apply a patterned and/or textured treatment to asphalt or concrete in accordance with manufacturer's recommendations.

L. For application requiring removal and replacement of existing pavement, meet the requirements of FDOT Specifications Section 350 for cement concrete pavement; the

requirements of Section 334 for Superpave asphalt or Section 337 for FC 9.5 and FC 12.5 asphalt.

M. Protect treated surfaces from traffic and environmental effect until the area is completely coated/imprinted and any coating have dried or cured according to the manufacturer's instructions. Complete all utility, traffic loop detector, and other items requiring a cut and installation under the finished surface, prior to pattern installation. For asphalt roadways, apply patterned/textured pavement a minimum of 14 days after placement of the adjacent pavement. Upon completion of the installation, the City or designee will check the area at random location(s) for geometric accuracy, as specified in the plans. If any of the chosen areas have an imprint width and depth that is less than the manufacturer's specifications, correct the entire textured area, at no additional cost to the City. Supply the specified pattern and color sample for the Engineer's use to visually determine that the material matches the color specified in the plans. For any continuous or abutting areas, i.e., all treated areas of an intersection, color material must be from the same lot/batch. Provide certification that the textured pavement was installed in accordance with the manufacturer's requirements.

N. Textured pavement on crosswalks and travel lanes are to be tested for skid resistance in accordance with ASTM E303.

END OF SECTION

02526 CONCRETE PAVEMENT, CURB AND WALKWAYS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Concrete pavement, curbs and sidewalk shall be constructed to the lines and grades and dimensions required for a complete installation as shown on the drawings and specified herein.

1.0.2. SUBMITTALS

A. Shop drawings for reinforcing, joint material and mix designs shall be submitted for review in accordance with the Section 01300 "Submittals".

PART 2 – PRODUCTS

2.0.2. MATERIALS

A. All roadways are to be de-mucked or stabilized with geotextile material in accordance with the geotechnical report and City requirements.

B. Laboratory analysis shall be complete, and the material approved by the Engineer prior to placement.

B. Geotextile material: Woven fabric to be structurally prepared and placed as per manufactures written specification.

C. Sub-grade: limited to maximum six (6") diameter clean non deleterious material Sub grade to be proof-rolled. Subgrade material supporting the roadway and shoulders shall have a minimum lime rock bearing (LBR) of 40. The stabilized subgrade shall be twelve (12) inches compacted to 98% of maximum dry density as per AASHTO-T-180.

D. Lime rock: The material used in lime rock base courses shall be material classified as either Miami Oolite Formation or Ocala Formation at the Contractor's option having a minimum percentage of calcium or magnesium of 60; however, only one formation may be used on any contract. Lime rock base course shall have a minimum bearing ratio (LBR) of 100 and shall be minimum of eight (8) inches thick. Base material shall be compacted to a density of not less than 98% of maximum dry density as determined by AASHTO-T180 under all paved areas.

1. Composition:

    a. The lime rock material shall contain not more that 0.5 percent of organic material or objectionable matter and shall show no significant tendency to air slake or undergo any chemical under exposure to weather.

    b. Lime rock material shall contain not less than 70 percent of carbonates of calcium and magnesium. The maximum percentage of water sensitive clay material shall be three (3).

2. Gradation: At least 97 percent (by weight) of the material shall pass a 3 1/2-inch sieve and the material shall be graded uniformly down to dust. The fine material shall consist entirely of dust of fracture. All crushing or breaking up which might be necessary in order to meet such size requirements shall be done before the material is placed on the road.

3. Quality:

a. The lime rock material shall be uniform in quality and shall not contain cherty or other extremely hard pieces or lumps, balls or pockets of sand or clay size material in sufficient as to be detrimental to prevent proper bonding, finishing or strength of the lime rock base. Lime rock material shall be nonplastic, and the liquid limit shall not exceed 35.

b. Lime rock material shall have an average LBR value of not less than 100.

E. Sidewalks:

1. The replacement of gray concrete sidewalks throughout the City shall be with the Miami-Dade County's sidewalk color standard, unless otherwise specified by any applicable City land use board, in accordance with Resolution 2019-30800.

2. The Public Works Director has the authority to determine on a street-by-street basis if replacement of sidewalks to Miami-Dade County's sidewalk color standard is appropriate.

2.0.1. CONCRETE

A. Concrete shall be composed of cement, fine aggregate, coarse aggregate, and water, so proportioned and mixed as to produce a plastic workable mixture in accordance with all requirements under this section suitable to the specific conditions of placement.

B. Cement:

1. The cement shall be a standard brand of Portland cement manufactured within the continental limits of the United States. It shall meet the requirements of ASTM C150 "Portland Cement" and shall be Type II.

2. Only one brand of cement shall be used in any individual structure unless approved by the Engineer. Cement which has become damaged, partially set, and lumpy or caked shall not be used the entire contents of the sack or container which contains such cement will be rejected. No salvage or reclaimed cement shall be used.

3. Different types of cement shall not be mixed nor shall they be used alternately except when authorized in writing by the City or their designee. Different brands of cement or the same brand from different mills may be used alternately. A resubmittal will be required if different cements are proposed during the Project.
4. Slump shall not exceed six inches (6").

5. Concrete for underground work shall be acid resistant cement and shall maintain a minimum compressive strength of 4000 psi in 28 days.

6. The total alkalies in the cement (calculated as the percentage of NA2O plus 0.658 times the percentage of K2O) shall not exceed 0.40%.

7. The proposed Portland Cement shall not contain more than 8% tricalcium aluminate and more than 12% tetracalcium aluminoferrite.

8. Cement shall be stored in a suitable weather-tight building so as to prevent deterioration or contamination. Cement which has become caked, partially hydrated, or otherwise damaged will be rejected. The Contractor shall provide suitable means for storing and protecting the cement against dampness. Bags of cement which for any reason may become partially set, or which contain lumps of caked cement, shall be rejected. In no instance shall any portion of a bag of damaged cement, or a bag containing lumps of caked cement, be used. Cement salvaged from discarded or used sacks shall not be used. Different brands of cement, even if tested and approved, shall not be mixed during use, nor used alternately in any section of the work without written permission of the Engineer.

C. Aggregates:

1. Fine Aggregate (Sand) in the various concrete mixes shall consist of natural or manufactured siliceous sand, clean and free from deleterious substances, and graded within the limits of ASTM C33.

2. Coarse Aggregate: Coarse aggregate shall consist of gravel, broken stone or local limerock. Coarse aggregate shall be size #57 or #67 as graded within the limits given in ASTM C33 unless otherwise specified. It shall be free from adherent coatings.

3. Aggregates shall be tested for gradation by sieve analysis tests in conformance with ASTM C136.

4. When tested for soundness in accordance with ASTM C88, the loss resulting after five cycles shall not exceed 10 percent for fine or coarse aggregate when using either magnesium sulfate or sodium sulfate.

5. When tested in accordance with "Potential Reactivity of Aggregates (Chemical Method)" (ASTM C289), the ratio of silica released to reduction in alkalinity shall not exceed 1.0. F. When tested in accordance with "Organic Impurities in Sands for Concrete" (ASTM C40), the fine aggregate shall produce a color in the supernatant liquid no darker than the reference standard color solution.

6. When tested in accordance with "Resistance to Abrasion of Small size Coarse Aggregate by Use of the Los Angeles Machine" (ASTM C131), the coarse aggregate shall show a loss not exceeding 42 percent after 500 revolutions, or

10.5 percent after 100 revolutions

D. Water: Water shall be taken from a potable water supply and shall be fresh, clean and free from injurious amounts of oil, acid, alkali or organic matter.

E. Admixtures:

26. Air entraining agent shall be added to all concrete unless noted otherwise. The agent shall provide entrained air in the concrete in accordance with ASTM C260.

27. The following admixtures are required or used for water reduction, slump increase, and/or adjustment of initial set. Admixtures permitted shall confirm to the requirements of ASTM C494. Admixtures shall be non-toxic after 30 days and shall be compatible with and made by the same manufacturer as the air-entraining admixtures.

a. Water reducing admixture shall conform to ASTM C494, Type A and shall contain no more than 0.05% chloride ions. Acceptable products are "Eucon Series" by the Euclid Chemical Company, "Master Pozzolith Series" by BASF, and "Plastocrete Series" by Sika Corporation.

b. High range water reducer shall be sulfonated polymer conforming to ASTM C494, Type F or G. The high range water reducer shall be added to the concrete at either the batch plant or at the job site and may be used in conjunction with a water reducing admixture. The high range water reducer shall be accurately measured and pressure injected into the mixer as a single dose by an experienced technician. A standby system shall be provided and tested prior to each day's operation of the job site system. Concrete shall be mixed at mixing speed for a minimum of 100 mixer revolutions after the addition of the high range water reducer. Acceptable products are "Eucon 37" or Plastol 5000 by the Euclid Chemical Company, "Master Rheobuild 1000 or Master Glenium Series" by BASF, and "Daracem 100 or Advaflow Series" by W.R. Grace. High range water reducer shall be mandatory for class A1 concrete intended for placement in walls.

c. A non-chloride, non-corrosive accelerating admixture may be used where specifically approved by the City or their designee. The admixture shall conform to ASTM C494, Type C or E, and shall not contain more chloride ions than are present in municipal drinking water. The admixture manufacturer must have longterm noncorrosive test data from an independent testing laboratory (of at least a year's duration) using an acceptable accelerated corrosion test method such as that using electrical potential measures. Acceptable products are "Accelguard 80/90 or NCA" by the Euclid Chemical Company and "Daraset" by W.R. Grace.

d. A water reducing retarding admixture may be used where specifically approved by the Engineer. The admixture shall conform to ASTM C494, Type D and shall not

contain more than 0.05% chloride ions. Acceptable products are "Eucon NR or Eucon Retarder 100" by the Euclid Chemical Company, "Pozzolith Retarder" by BASF, and "Plastiment" by Sika Corporation.

28. Admixtures containing calcium chloride, thiocyanate or more than 0.05 chloride ions are not permitted

F. Membrane Curing Compound: Membrane curing compound shall conform to the requirements of AASHTO Designation M 148, Type 1-clear, or type 2-white pigmented.

G. Expansion Joint Filler:

1. Preformed expansion joint filler shall be of the nonextruding and resilient bituminous type and conform to the requirements of AASHTO Designation M 213.

2. Expansion joint filler shall be gray neoprene sponge rubber that conforms to AASHTO Designation M 153, Type I.

H. Reinforcing and Welded Wire Fabric: Reinforcing and welded wire fabric shall be 6"X6" – 10/10 steel bars to be used in curb & gutter and wire mesh in sidewalk.

2.0.2. CONCRETE PAVERS

A. Concrete pavers shall Miami-Dade County's color standard approved equal. Use of other colors to complement project design theme and/or match existing pavers' configuration require shall only be used with written approval from the City of OpaLocka Beach Public Works Department.

B. All concrete pavers shall have a skid resistant finish.

C. Provide products supplied by a member of the Interlocking Concrete Pavement Institute (ICPI) as called for in the Drawings and/or as specified herein.

D. Concrete pavers shall conform to the requirements of ASTM C936.

E. Concrete pavers shall have an average compressive strength of 8,000 psi with no individual unit under 7,200 psi.

F. Average absorption of 5% with no unit greater than 7% when tested in accordance with ASTM C140.

2.0.3. TEXTURED PAVEMENT

A. "Street Bond SP150E Coating Material" refers to a high performance premium coating material consisting of epoxy modified acrylic polymers blended with sand and aggregate, and specially formulated by Integrated Paving Concept, Inc. (Tel. 800-6885652), for application on asphalt surfaces to provide a durable, long lasting color and texture to the asphalt surface.

B. "Street Bond Colorant" is a highly concentrated, high quality, UV stable pigment blend designated to be added to Street Bond SP150E coating system to provide color to the coating. The colors to be used shall be shown on the drawings. The same Street Bond Colorant shall be used in each SP150E coating layer to the asphalt surface. One pint of colorant shall be used with one pail of Street Bond coating material.

C. Use only patterned/textures pavement products listed on the Qualified Products List (QPL). Meet manufacturer's Specifications for all pattern/texture templates, coating, and coloring material. Use only material that is delivered to the job site in sealed containers bearing the manufacture's original labels. Material coating used to achieve the pattern/texture and/or color shall produce an adherent, weather resistant, skid resistant surface capable of resisting deformation to traffic. Paint and thermoplastic material must meet the requirements of this Specifications and FDOT Specifications Section 971, except that the requirements for Color and Retroreflectivity do not apply.

D. Manufacturers seeking approval for inclusion on the QPL must submit application and certifications in accordance with Section 6 along with the following documentation:

1. Manufacturer's specifications and procedures for materials and installation.

2. Manufacturer's certification with supporting test data and results that the patterned/textured pavement installed in accordance with the manufacturer's specifications and procedures has been tested in accordance with the ASTM E274, Skid Resistance of Paved Surfaces using a standard ribbed full scale tire at a speed of 40 mph (FN40R), and has a minimum FN40R value of 35.

PART 3 – EXECUTION

3.0.1. INSTALLATION OF ROADWAY MATERIALS

A. Subgrade: The work shall consist of bringing the bottom of the excavations and the top of the embankments of the roadways between the outer limits of the roadway to a surface conforming to the lines, grades, and cross sections shown on the plans, of uniform required density, ready to receive the base or paving course. The final elevation of the subgrade shall be within 0.1 foot of the required elevation.

1. All submerged stumps, roots, and other unsuitable matter encountered in the preparation of the subgrade shall be removed and replaced with a suitable material.

2. The material in the top 12" of subgrade shall have a minimum CBR of 25 when compacted to 95% of maximum density as determined by AASHTO Specification T 180-74. In areas such a condition does not exist, the top 12" of subgrade shall be stabilized as described below:

3. Stabilizing Material: Where stabilized subgrade and shoulders are required, the subgrade and shoulder material shall have a minimum California Bearing Ratio Material Value not less than 25. If the in place subgrade or shoulder material has a CBR value less than 25, a suitable stabilizing material shall be added. Such stabilizing material shall be crushed lime rock, coarse lime rock screenings, or any other stabilizing material approved by the Engineer.

4. Suitable stabilizing materials obtained from an existing base or pavement which is to be replaced or abandoned may be used providing that such material contain no fragments larger than 3 ½ inches in diameter.

5. The entire subgrade, including 2 feet beyond the edge of the proposed pavement, shall be thoroughly plowed, scarified, and mixed to a depth of not less than 6 inches below grade. All pot holes and other irregularities shall be filled with suitable material or trimmed down as the case may be, prior to compacting. If the area is cut to grade in natural lime rock, the top 6 inches shall be thoroughly plowed, scarified, and mixed. This plowed, scarified, and mixed layer shall be compacted to not less than 95 percent of the maximum density as determined by AASHTO Specifications T 180-74 prior to the placement of the base course.

6. After the subgrade has been prepared as specified above, the Contractor shall maintain it free from ruts, depressions, and damage resulting from the hauling and handling of any material, equipment, tools, etc. Ditches or drains shall be constructed and maintained along the completed subgrade section. Just before the base course is laid, the subgrade shall be tested as to, elevation and density.

B. Transporting Lime rock: The lime rock shall be transported to the point where it is to be used, over rock previously placed if practicable, and dumped on the end of the preceding spread. No hauling over the subgrade or dumping on the subgrade shall be done

C. Spreading Lime rock:

1. When using new material, the lime rock shall be spread uniformly, and all segregated areas of fine or coarse rock shall be removed and replaced with wellgrade rock.

2. When the specified compacted thickness of the base is greater than 6-inches, the base shall be constructed in two courses. The thickness of the first course shall be approximately one-half the total thickness of the finished base, or enough additional to bear the weight of the construction equipment without disturbing the subgrade.

3. When using the existing base material, the Contractor shall expose the existing base material to the final base grade shown on the drawings. The Contractor shall then proceed with scarifying the top 6 inches of the base and reworking and compacting the material to achieve the required cross-section.

4. Minimum longitudinal slope shall be 0.3% for all roadways. For roadways with gutters, the longitudinal slope may be reduced upon approval by the Public Works Department.

D. Compacting and Finishing Base:

1. General:

a. For single course base, after spreading is completed, the entire surface shall be scarified and then shaped so as to produce the required grade and cross section after compacting.

b. For multi lift base course, the first course shall be four (4) inches thick compacted cleaned of foreign material, bladed and brought to a surface cross section approximately parallel to that of the finished base. Prior to the spreading of any material for the upper course, the density test for the lower course shall be made and the Engineer shall have determined that the required compacting has been obtained. After the spreading of material for the second course is completed, its surface shall be finished and shaped so as to produce the required grade and cross section after compacting and free of scab and laminations.

2. Moisture Content: When the material does not have the proper moisture content to insure the required density, wetting or drying will be required. If the material is deficient in moisture, water shall be added and uniformly mixed in by discing the base course to its full depth. If the material contains an excess of moisture, such excess shall be reduced or removed until the required moisture content is attained before being compacted. Wetting or drying operations shall involve manipulation of the entire width and depth of the base as a unit.

3. Density Requirements: As soon as proper conditions of moisture are attained, the material shall be compacted to a density of not less than 98 percent of the

maximum density as determined by AASHTO Designation T-180 as described below:

a. During final compacting operations, if blading of any areas is necessary to obtain the true grade and cross section, the compacting operations for such areas shall be completed prior to making the density determinations on the finished base.

b. At least three density determinations shall be made at the completion of each course, also the density determinations shall be made at new/replaced every utility crossings and also at every 7,000 square feet of roadways or at more frequent intervals if deemed necessary by the Engineer.

4. Correction of Defects:

a. If at any time the subgrade material should become mixed with the base course material, the Contractor shall dig out and remove the mixture, reshape and compact the subgrade and replace the materials removed with clean base material, which shall be shaped and compacted as specified above.

b. If cracks or checks appear in the base, either before or after priming, which in the opinion of the Engineer would impair the structural efficiency of the base course, the Contractor shall remove such cracks or check by re-scarifying, reshaping, adding base material where necessary and recompacting.

E. Testing Surface: The finished surface of the base course shall be checked with a templet cut to required crown and cross section and with a 10-foot straightedge laid parallel to the centerline of the road. All irregularities greater than 1/4-inch shall be corrected by scarifying and removing or adding lime rock as may be required, after which the entire area shall be recompacted as specified herein before.

F. Thickness Determinations:

The thickness of the compacted lime rock base shall be measured at intervals of not more than 200-feet. Measurements shall be taken at various points on the cross sections prior to the application of the prime coat.

2. The measurements shall be taken in holes through the base of not less than 3inches in diameter. Where the compacted base is deficient by more than 1/2-inch from the thickness called for on the drawings, the Contractor shall correct such areas by scarifying and adding lime rock. The base shall be scarified and rock added for a distance of 100-feet in each direction from the edge of the deficient area. The affected areas shall then be brought to the required state of compaction and to the required thickness and cross section.

G. Priming and Maintaining:

1. The prime coat shall be applied only when the base meets the specified density requirements and the moisture content in the top half of the base does not exceed 90 percent of the optimum moisture content of the base material. At the time of priming, the base shall be firm and unyielding.

2. The Contractor will be responsible for assuring that the true crown and grade are maintained with no rutting or other distortion and that the base meets all the requirements at the time the surface course is applied.

3.0.2. INSTALLATION OF CONCRETE

A. The concrete shall be placed on stabilizing or compacted subgrade to such depth that, when it is consolidated and finished, the slab thickness required by the drawings will be obtained at all points and surface will at no point be below the grade specified for the finished surface, after application of the allowable tolerance. The concrete shall be deposited on the stabilized subgrade in a manner which will require as little rehandling as possible. Placing of the concrete shall be continuous between transverse joints, without the use of intermediate bulkheads.

B. Steel reinforcement is called for on the drawings shall be placed at mid slab depth and the fabric shall be maintained at this location during the placing and finishing operations.

C. Concrete shall be thoroughly consolidated against and along the faces of all forms, and along the full length and on both sides of all joint assemblies, by means of hand operated, vibrators. Vibrators shall not be permitted to come in contact with joint assembly, the subgrade or a side form. Vibration at any one location shall not continue so long as to produce puddling or the accumulation of excessive grout on the surface. In no case shall the vibrator be operated longer than 15 seconds in any one location.

1.

D. Coloring of concrete shall be done by dry-mixing the compound and broadcasting over the fresh-poured concrete after it has been struck off.

E. Striking off, Consolidating and Finishing Concrete:

1. Immediately after the placing, the concrete shall be struck off, consolidated and finished, to produce a finished pavement conforming to the cross section, width and surface finish required by the drawings and specifications. The sequence of operations shall be as follows: strike-off; vibratory consolidation; screeding; floating; removal of laitance; straight edging; and final surface finish. Strike-off, consolidation and finishing shall be accomplished in a manner such as to avoid damage to, or misalignment of, joint assemblies, dowels and other embedded items.

F. Straight edging and Surface Correction:

1. After floating has been completed and the excess water removed, but while the concrete is still in a plastic state, the surface of the concrete shall be tested for trueness with an accurate 10-foot straightedge. The straightedge shall be furnished by the Contractor. The straightedge shall be held in successive positions parallel to the road center line, in contact with the surface, and the whole area tested from one side of the slab to the other as necessary. The advance along the road shall be in successive stages of not more than one-half the length of the straightedge. Any depressions shall be immediately filled with freshly mixed concrete and struck-off, consolidated and refinished. High areas shall be cut down and refinished. Straightedge testing and surface correction shall continue until the entire surface appears to conform to the required grade and cross section.

2. As soon as the concrete has hardened sufficiently to be walked on, straight edging shall again be done. All surface irregularities exceeding ¼-inch in a 10-foot shall be corrected by grinding as directed by the Engineer.

G. Final Finish: As soon as the water sheen has disappeared from the surface of the pavement and just before the concrete becomes non-plastic, a light broom finish shall be given to the surface.

H. Edging:

1. After the final finish has been applied, but before the concrete has become nonplastic, the edge of the pavement along each side of the strip being placed, on each side of transverse and longitudinal contraction joints and construction joints and along structure extending into the pavement, shall be carefully rounded to a ¼-inch radius except as otherwise indicated. A well-defined and continuous radius shall be produced and a smooth, dense mortar finish obtained. All concrete shall be completely removed from the top of the joint filler.

2. All joints shall be checked with a straightedge before the concrete has become non-plastic and, if one side of the joint is higher than the other or the entire joints is higher or lower than the adjacent slabs, corrections shall be made as necessary.

I. Joints:

Transverse Construction Joints: Transverse construction joints shall be constructed at the end of all pours and at other locations where the paving operations are stopped for as long as 30 minutes. Construction joints, however, shall not be placed within ten feet of any other transverse joint or of either end of a section of pavement. If sufficient concrete has not been placed to form a slab at least ten feet long, the excess concrete, back to the last preceding joint, shall be removed. The joints shall be formed by placing a wood or metal bulkhead accurately and securely in place, in a plane perpendicular to the profile and center line of the pavement.

2. Transverse & Longitudinal Contraction Joints: Construction joints shall be constructed at the interval indicated in the plans and shall consist of planes of weakness created by an edging tool. The cut in the fresh concrete shall be perpendicular to the surface of the pavement, shall extend to a depth of 1/3 of its thickness (1 ½" for 4" pavement) and shall have tooled edges as described above.

3. Expansion Joints: ½" Expansion Joints shall be formed by placing performed joint filler around all structures and foundations where pavement abuts curbs and gutters and at intervals not to exceed 100'.

4. Cleaning and Sealing Joints: Joints which are to be sealed, shall be filled with joint sealing material before the pavement is opened to traffic and as soon after completion of the curing period as is feasible. Just prior to sealing, each joint shall be thoroughly cleaned of all foreign material (including any membrane curing compound) and the joint faces shall be clean and surface-dry when the sealer is applied.

a. The sealing material shall be applied to each joint to conform to the details shown on the drawings and in accordance with the manufacture's recommendation. The pouring shall be done in such manner that the material will not be spilled on the exposed surfaces of the concrete. Any excess material on the surface of the concrete pavement shall be removed immediately and the pavement surface cleaned.

b. All cracks occurring in the pavement prior to its acceptance shall be cleaned out and sealed as specified above, except that the cracks and fractures shall be completely filled with joints sealer and any excess filler material cut down level with the pavement surface.

1.

3.0.3. INSTALLATION OF CONCRETE PAVERS

A. Install paver blocks as manufactured by licensee of Paver Systems, Inc., in accordance with the Drawings, manufacturer's recommendations, and Standard Details. Paver block construction shall conform to the requirements of Interlocking Concrete Pavers Institute (ICPI).

B. Where necessary to cut blocks, cutting shall be done so as leave tight joint along all adjacent edges and surfaces. Smoothly split or sawn blocks only will be accepted.

C. After final vibrating/compaction there shall be no more than ¼ inch deviation from proposed grades.

D. Installation of concrete pavers in non-roadway areas shall be in accordance with the following.

D. Replacement of all underground utilities that are in conflict with paver installation.

E. The finished subbase shall be approved before placement of limerock base.

F. The limerock base course shall be compacted to 98% of maximum dry density as per AASHTO T-180.

G. The finished limerock base course shall be approved by the City or designee prior to placement of the sand leveling course.

H. The uncompacted sand leveling base shall be screened over the compacted limerock base to an uncompacted thickness of 1½ inches. The bedding course shall be treated with soil sterilizers to prohibit growth of grass and weeds.

I. The paver blocks shall be laid in the pattern approved by the City of Opa-Locka Public Works Department in accordance with the Standard Details.

J. Construct concrete header curb in accordance with the Standard Details.

E. Installation of concrete pavers in on roadways shall be in accordance with the following.

K. Replacement of all underground utilities that are in conflict with paver installation.

L. The finished subbase shall be approved before placement of the concrete slab.

M. The concrete pavers on the roadway shall be installed over a 6-inch-thick concrete base reinforced with galvanized steel wire mesh 6X6-W1.4xW1.4 with 1½ inches bedding between the concrete base and the concrete pavers.

N. The uncompacted sand leveling base shall be screened over the concrete base to an uncompacted thickness of 1½ inches. The bedding course shall be treated with soil sterilizers to prohibit growth of grass and weeds.

O. Construct concrete header curb in accordance with the Standard Details..

3.0.4. INSTALLATION OF TEXTURED PAVEMENT

A. Applying a patterned and/or textured treatment to asphalt or concrete, in accordance with manufacturer's recommendations. Applications include the following:

Imprinting patterns into existing or new pavement and covering with a surface coating(s) of paint or thermoplastic.

2. Imprinting patterns into existing or new pavement and inlaying the imprint with performed thermoplastic material.

3. Colored, preprinted, preformed texturized thermoplastic material that is applied over existing pavement.

4. Colored thermoplastic material that can be imprinted and texturized during or after application to existing pavement.

B. Patterns are defined as visible surface markings. Imprinted textures are defined as palpable surface markings.

C. Use the location, pattern/texture type (brick, stone, etc.) and coating color as specified in the Plans. Joint openings shall not exceed ½ inch in width.

D. Apply a patterned and/or textured treatment to asphalt or concrete in accordance with manufacturer's recommendations.

E. For application requiring removal and replacement of existing pavement, meet the requirements of Section 350 for cement concrete pavement; the requirements of Section 334 for Superpave asphalt or Section 337 for FC 9.5 and FC 12.5 asphalt.

F. Protect treated surfaces from traffic and environmental effect until the area is completely coated / imprinted and any coating have dried or cured according to the manufacturer's instructions. Complete all utility, traffic loop detector, and other items requiring a cut and installation under the finished surface, prior to pattern installation.

1.

For asphalt roadways, apply patterned/textured pavement a minimum of 14 days after placement of the adjacent pavement. Upon completion of the installation, the Engineer will check the area at random location for geometric accuracy, as specified in the plans. If any of the chosen areas have an imprint width and depth that is less than the manufacturer's specifications, correct the entire textured area, at no additional cost to the City. Supply the specified pattern and color sample for the Engineer's use to visually determine that the material matches the color specified in the plans. For any continuous or abutting areas, i.e. all treated areas of an intersection, color material must be from the same lot/batch. Provide certification that the textured pavement was installed in accordance with the manufacturer's requirements.

G. Textured pavement on crosswalks and travel lanes are to be tested for skid resistance in accordance with ASTM E303.

3.0.5. INSTALLATION OF SIDEWALK

A. Sidewalks at intersections and driveways shall be six (6) inches thick. Driveways shall include a 4-foot section at 2% maximum cross slope as per Standard Details and FDOT Index 522-03.

B. Sidewalks not at intersections or driveways shall be four (4) inches thick.

C. The concrete for sidewalk shall be 3,000 psi, with Miami-Dade County's sidewalk color standard match existing.

D. The concrete shall be reinforced with 6X6-W1.4xW1.4 welded steel wire mesh.

P. Wherever possible, sidewalks shall be designed with a minimum effective width of 6 feet on residential streets and 8 feet on collectors and arterials. Effective sidewalk widths shall be determined in accordance with the Miami Dade County Standard Details, firstly, and FDOT if not specified.

E. All wayfinding signage shall be installed in the back of the sidewalk wherever permitted by sight visibility, otherwise 4 feet minimum clear pedestrian path around sign shall be provided.

F. Repair of Concrete Sidewalk Surface Defects:

Q. Remove and replace all concrete surfaces that contain surface defects, which includes, but not limited to cracking, cracks which penetrate to reinforcement or completely through non-reinforced sections regardless of width, spalling, pop-outs, honeycomb, rock pockets and other objectionable and rough conditions and other objectionable conditions deemed unacceptable to the Engineer immediately after form removal. Test unformed surfaces sloped to drain for trueness of slope, in addition to smoothness.

R. Concrete rejected for any reason is to be removed and replaced, including labor, forms and reinforcing, to meet specifications at no additional cost to the City. Compounds for adhesion or as patching ingredients may be used, if approved by the City or designee. All repair of surface defects to be made require the approval of the City or designee, as to the method and procedure. Approval of the completed work must be obtained from the City or designee.

S. Remove existing sidewalk, or curb and gutter to either the nearest joint beyond or to where no remaining section is less than five (5) feet long.

3.0.6. INSTALLATION OF CURB RAMPS

A. It is the policy of the City of Opa-Locka Public Works Department to install truncated dome detectable warnings on the curb ramps, in compliance with the ADA Standards and PROWAG requirements for detectable warnings on walking surfaces and with FDOT standards. Curb ramps shall be directional and aligned with the crosswalk. Refer to the City of Opa-Locka Street Design Guidelines.

B. The installation of truncated domes on curb ramp shall be in compliance with the FDOT Index 522-002 and FDOT Specifications Section 527 and associated QPL. This Specification excludes stamped concrete detectable warnings due to poor performance.

C. The detectable warnings are required to have a dark-on-light or light-on-dark contrast with the surrounding concrete. Use Miami-Dade County' color standard on the detectable warning portion of the curb ramp. The color of the detectable warnings shall be integral with the device material.

D. Provide certification from an independent testing laboratory that the applied detectable warning device meets the above minimum requirements. Submit this certification for review and approval by the City or designee at least 10 days before the planned installation of any applied detectable warning device.

E. At least ten (10) days before the first installation of any applied detectable warning device, submit manufacture's installation recommendations and instructions for review and approval by the City or designee.

F. Special Considerations: 2 curb ramps per corner should always be used unless technically infeasible. US Access Board Public Rights-of-Way Access Advisory Committee strongly discourages single installations where possible because single ramps can:

    1. Misdirect blind pedestrians who use the slope of curb ramps as a cue.

    2. Increase crossing times for persons who use wheeled mobility aids and can place users into oncoming traffic at small radius corners where it is difficult to provide landing space at the bottom that is wholly within marked crossings.

    3. Drivers may not be as alert to persons crossing at the apex of a corner.

G. If a single diagonal curb ramp is installed because of technical infeasibility, a 48 inches clear space wholly contained within the crosswalk must be provided at the bottom of the curb ramp to allow wheelchair users enough room to maneuver off of the ramp and into the crosswalk

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This section includes minimum construction requirements for precast concrete flared end sections. The sections shall be constructed in accordance with FDOT specifications and Standard Details, and in conformity with the Plans.

1.0.2. PRECAST PRESTRESSED CONCRETE CONSTRUCTION

A. Fabricate, store, transport and erect precast/prestressed concrete members prestressed by the pretensioning method. Pretensioned precast prestressed concrete products are products prestressed by the pretensioning method. In this method, steel or fiber reinforced polymer (FRP) components are stressed and anchored; the concrete for the product is then cast and cured, and finally the stress in the steel or FRP components is released from the anchorages to the concrete through bond, after the concrete has attained its specified release strength.

B. A precast prestressed concrete plant, hereinafter called plant, is an independent operating facility capable of performing all the operations necessary to fabricate precast/prestressed concrete products.

1.0.3. QUALITY ASSURANCE

A. The Engineer will perform periodic inspections, sampling, and testing to ensure of the quality and acceptability of the materials, methods, techniques, procedures and processes being utilized in the fabrication of precast prestressed concrete products.

1.0.4. RELATED SECTIONS

Section 03400 - PRECAST PRESTRESSED CONCRETE

PART 2 – PRODUCTS

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

PART 3 – EXECUTION

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

END OF SECTION

2-69

City of Opa-Locka Sesame th St. & Atlantic AveStreet Culvert Replacement Between NW 135

02630 OUTFALL ENDWALL

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This section includes minimum construction requirements for precast concrete headwalls. The endwalls shall be constructed in accordance with FDOT specifications and Standard Details, and in conformity with the Plans.

1.0.2. PRECAST PRESTRESSED CONCRETE CONSTRUCTION

A. Fabricate, store, transport and erect precast/prestressed concrete members prestressed by the pretensioning method. Pretensioned precast prestressed concrete products are products prestressed by the pretensioning method. In this method, steel or fiber reinforced polymer (FRP) components are stressed and anchored; the concrete for the product is then cast and cured, and finally the stress in the steel or FRP components is released from the anchorages to the concrete through bond, after the concrete has attained its specified release strength.

B. A precast prestressed concrete plant, hereinafter called plant, is an independent operating facility capable of performing all the operations necessary to fabricate precast/prestressed concrete products.

1.0.3. QUALITY ASSURANCE

A. The Engineer will perform periodic inspections, sampling, and testing to ensure of the quality and acceptability of the materials, methods, techniques, procedures and processes being utilized in the fabrication of precast prestressed concrete products.

1.0.4. RELATED SECTIONS

Section 03400 - PRECAST PRESTRESSED CONCRETE

PART 2 – PRODUCTS

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

PART 3 – EXECUTION

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

END OF SECTION

02641 PIPE CULVERTS

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

A. Materials and installation for pipe culverts with Aluminized Steel Type 2 ULTRA FLO (UF) corrugated steel pipe by Contech Engineered Solutions or approved equal.

1.0.2. RELATED WORK

A. Section 02222 "Excavation – General"

B. Section 02230 "Clearing and Grubbing".

C. Section 02314 "Excavation, Backfill and Fill for Structural Facility and Utility Systems".

PART 2 – PRODUCTS

2.0.1. TYPE OF PIPE TO BE USED

A. When the Plans designate a type (or types) of pipe, use only the type (or choose from the types) designated.

B. When metal pipe is allowed and no future maintenance concerns exist, the Contractor may propose the pipe gage based on the FDOT's Drainage Manual and Culvert Service Life Estimator for approval by the Engineer. When extending existing pipes, construct the pipe extensions of the same size and kind as the existing pipe. Extensions of existing pipes, whose materials are no longer produced, shall be extended with the most similar pipe material available.

C. The Aluminized Steel Type 2 coils shall conform to the applicable requirements of AASHTO M 274 or ASTM A929.

2.0.2. COUPLING BANDS

A. Coupling bands for the UF shall be made of the same base metal and coatings as the UF to a minimum of 18 gauge.

B. Ends of the UF are rerolled with annular corrugations for proper indexing.

C. Connection fasteners will be provided with by the manufacturer.

PART 3 – EXECUTION

3.0.1. LAYING PIPE

A. Lay all pipe, true to the lines and grades given, with bells upgrade and spigot end fully entered into the bell. When pipe with quadrant reinforcement or circular pipe with elliptical reinforcement is used, install the pipe in a position such that the manufacturer's marks designating "top" and "bottom" of the pipe are not more than five degrees from the vertical plane through the longitudinal axis of the pipe. Do not allow departure from and return to plan alignment and grade to exceed 1/16 inch per foot of nominal pipe length, with a total of not more than 1 inch departure from theoretical line and grade. Take up and relay any pipe that is not in true alignment or which shows any settlement after laying at no additional expense to the City.

B. Do not use concrete pipe with lift holes except round pipe which has an inside diameter in excess of 54 inches or any elliptical pipe.

C. Repair lift holes, if present, with hand-placed, stiff, non-shrink, 1-to-1 mortar of cement and fine sand, after first washing out the hole with water. Completely fill the void created by the lift hole with mortar. Cover the repaired area with a 24 inch by 24 inch piece of filter fabric secured to the pipe.

D. Follow the manufacturer's instructions, to secure the filter fabric to the pipe, until the backfill is placed and compacted.

E. Do not cut or drill into or through the corrugations or ribs of plastic pipe except when necessary to meet the dimensional requirements shown in the Plans.

F. When installing pipes in structures, construct inlet and outlet pipes of the same size and kind as the connecting pipe shown in the Plans. Use the same pipe material within each continuous run of pipe. Extend the pipes through the walls for a distance beyond the outside surface sufficient for the intended connections, and construct the concrete around them neatly to prevent leakage along their outer surface as shown on FDOT's Standard Plans, Index 425-001. Keep the inlet and outlet pipes flush with the inside of the wall. Resilient connectors as specified in 942-3 may be used in lieu of a masonry seal.

G. Furnish and install a filter fabric jacket around all pipe joints and the joint between the pipe and the structure in accordance with Standard Plans, Indexes 425-001 and 430- 001. Use fabric meeting the physical requirements of Type D-3 specified in Section 985. Extend the fabric a minimum of 12 inches beyond each side of the joint or both edges of the coupling band, if a coupling band is used. The fabric must have a minimum width of 24 inches, and a length sufficient to provide a minimum overlap of 24 inches. Secure the filter fabric jacket

against the outside of the pipe by metal or plastic strapping or by other methods approved by the Engineer.

H. When rubber gaskets are to be installed in the pipe joint, the gasket must be the sole element relied on to maintain a tight joint. Soil tight joints must be watertight to 2 psi. Water-tight joints must be water-tight to 5 psi unless a higher pressure rating is required in the Plans.

I. When laying pipes that pass through mechanically stabilized earth (MSE) reinforced fill, connect the portion of the pipe within the wall to the external portion of the pipe run only after the full height of the wall supported embankment is in place.

J. When Wall Zone Pipes are shown in the Plans, meet the following requirements:

1. Use resilient connectors on pipes entering and leaving drainage structures.
2. Provide a 2 to 4 inch pipe overhang beyond the drainage structure internal walls.
3. For pipes without welded joints, meet the following additional requirements:
   3.1 Pipe joints must be watertight to 10.8 psi when pulled out 2 inches from the fully homed position in both straight alignment and 5% deflection.
   3.2 Do not allow the gap between sections of pipe to exceed 5/8 inch for all pipe diameters.

3.0.2. TRENCH EXCAVATION

C. Excavate the trench for storm and cross drains, and side drains as specified in sections 02222 "Excavations – General" , Section 02230 "Clearing and Grubbing" and Section 02314 "Excavation, Backfill and Fill for Structural Facility and Utility Systems".

3.0.3. FOUNDATION

A. Provide a suitable foundation, where the foundation material is of inadequate supporting value, as determined by the Engineer. Remove the unsuitable material and replace it with suitable material, as specified in section 02314 "Excavation, Backfill and Fill for Structural Facility and Utility Systems".. Where in the Engineer's opinion, the removal and replacement of unsuitable material is not practicable, he may direct alternates in the design of the pipeline, as required to provide adequate support. Minor changes in the grade or alignment will not be considered as an adequate basis for extra compensation.

B. Do not lay pipe on blocks or timbers, or on other unyielding material, except where the use of such devices is called for in the Plans.

3.0.4. BACKFILLING

A. Backfill around the pipe as specified in section 02314 "Excavation, Backfill and Fill for Structural Facility and Utility Systems" unless specific backfilling procedures are described in the Contract Documents.

3.0.5. PLUGGING PIPE

A. When existing pipe culverts are to be permanently placed out of service, fill them with flowable fill that is non-excavatable, contains a minimum 350 pounds per cubic yard of cementitious material. Install masonry plugs that are a minimum of 8 inches in thickness, in accordance with FDOT's Standard Plans, Index 430-001.

B. When proposed or existing pipe culverts are to be temporarily placed out of service, plug them with prefabricated plugs as shown in the Plans. Install prefabricated plugs in accordance with the manufacturer's recommendations. Do not fill or construct masonry plugs in any pipe culvert intended for current or future service.

3.0.6. GRATES

A. Use metal gratings that meet the requirements of 962-8 of FDOT's Standard Specifications Manual.

3.0.7. END TREATMENT

A. Place an end treatment at each storm and cross drain, and side drain as shown in the Plans. Sod around end treatments in accordance with FDOT'S Standard Plans, Index 570-001.

3.0.8. TYPE CONCRETE ENDWALLS

A. Construct in accordance with the Plans and Standards Plans.

3.0.9. REMOVING EXISTING PIPE

A. If the Plans indicate that existing pipe is to remain the property of the Department, collect and stack along the right-of-way all existing pipe or pipe arch so indicated in the Plans to be removed, or that does not conform to the lines and grades of the proposed work and that is not to be re-laid, as directed by the Engineer. Take care to prevent damage to salvageable pipe during removal and stacking operations.

3.0.10. SPECIFIC REQUIREMENTS FOR CORRUGATED METAL PIPE

A. Make a field joint with locking bands, as specified in Article 9 of AASHTO M36 and AASHTO M196M for aluminum pipe. For aluminum pipe, fabricate bands from the same alloy as the culvert sheeting.

B. When corrugated metal pipe is used as side drain, storm and cross drain, or gutter drain, use a rubber or neoprene gasket of a design shown to provide a joint. Use a gasket of one of the following dimensions:

1. For annular joints with 1/2 inch depth corrugation: either a single gasket a minimum of 7 inches by 3/8 inch or two gaskets a minimum of 3-1/2 inches by 3/8 inch; and for annular joints with 1 inch depth corrugations: either a single gasket a minimum of 7 inches by 7/8 inch or two gaskets a minimum of 3-1/2 inches by 7/8 inch.

2. For helical joints with 1/2 inch depth corrugation: either a single gasket a minimum of 5 inches by 1 inch or two gaskets a minimum of 3-1/2 inches by 1 inch; and for helical joints with 1 inch depth corrugations: either a single gasket a minimum of 5 inches by 1-1/2 inches or two gaskets a minimum of 3-1/2 inches by 1-1/2 inches.

3. Such other gasket designs as may be approved by the Engineer.

C. If, in lieu of a single gasket spanning the joint, two gaskets are used, place these individual gaskets approximately 2 inches from each pipe end at the joint. When two gaskets are used, seal the overlapping area on the coupling band between the gaskets consistent with the joint performance specified. The Contractor may tuck a strip of preformed gasket material over the bottom lip of the band for this purpose. Use coupling bands that provide a minimum circumferential overlap of 3 inches. As the end connections on the coupling band are tightened, ensure that there is no local bending of the band or the connection. Use precurved coupling bands on pipe diameters of 24 inches or less.

D. Use flat gaskets meeting the requirements of ASTM D1056, designation 2C2 or 2B3. In placing flat gaskets on pipe prior to placing the coupling band, do not stretch the gasket more than 15% of its original circumference. Use circular gaskets meeting the requirements of ASTM C361. Do not stretch the circular gasket more than 20% of its original circumference in placing the gasket on pipe.

E. Apply an approved vegetable soap lubricant.

F. In lieu of the above-specified combination of locking bands and flat gaskets, the Contractor may make field joints for these pipe installations by the following combinations:

1. Use the metal bands as specified in Article 9 of AASHTO M36M that are at least 10-1/2 inches wide and consist of a flat central section with a

corrugated section near each end, designed to match the annular corrugation in the pipe with which they are to be used. Connect the bands in a manner approved by the Engineer, with a suitable fastening device such as the use of two galvanized 1/2-inch diameter bolts through a galvanized bar and galvanized strap, suitably welded to the band. Use a strap that is the same gage as the band. Where helically corrugated pipe is to be jointed by this alternate combination, ensure that at least the last two corrugations of each pipe section are annular, and designed such that the band will engage each pipe end with the next-to-outside annular corrugation.

2. For these bands, use a rubber gasket with a circular cross-section of the "O-ring" type conforming to ASTM C361. Use gaskets having the following cross-sectional diameter for the given size of pipe:

Pipe Size	Gasket Diameter
12 inches through 36 inches (with 1/2-inch depth corrugations)	13/16 inch
42 inches through 96 inches (with 1/2-inch depth corrugations)	7/8 inch
36 inches through 120 inches (with 1 inch depth corrugations)	1-3/8 inches

3. Use channel band couplers in helical pipe with ends which have been reformed and flanged specifically to receive these bands. Use channel band couplers that are of a two-piece design, are fabricated from galvanized steel stock conforming to AASHTO M36, have 2 inch by 2 inch by 3/16 inch angles fastened to the band ends to allow for proper tightening, and meet the following:

Band Thickness	Pipe Wall Thickness
0.079 inch	0.109 inch or lighter
0.109 inch	0.138 inch or heavier
3/4 inch wide	0.109 inch or lighter
One inch wide	0.138 inch or heavier

G. Furnish two 1/2-inch diameter connection bolts with each band, that conform to ASTM A307, Grade A and are electroplated in accordance with ASTM B633.

H. Use a gasket with the joint that is a hydrocarbon blend of butyl rubber meeting the chemical composition and physical properties of 942-2.2. Use a 3/8 by 3/4-inch gasket for pipe fabricated from 0.109 inch or lighter material and a 3/8 by 1 inch gasket for pipe fabricated from 0.138 inch and heavier material.

I. The Contractor may use a flange band coupler without the gasket for all applications other than side drain, storm and cross drain, and gutter drain.

J. Do not use the flange band coupler to join dissimilar types of pipes.

K. The Contractor may join reformed flanged helical pipe to existing annular or reformed pipe having annular ends. On non-gasketed installations, use either an annular band or an alternate joint. On gasketed installations, use an annular band, minimum of five corrugations in width, in conjunction with two O-ring gaskets. Use mastic material to seal the area of band overlap.

L. Install pipe using either a trench or open ditch procedure.

M. Check pipe shape regularly during backfilling to verify acceptability of the construction method used. Pipe deflected 5% or more of the certified actual mean diameter of the pipe at final inspection shall be replaced at no cost to the City. Deflection measurements are taken at the point of smallest diameter on the corrugations.

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Work included under this Section covers the furnishing of all labor, equipment and material required for cutting, removing, protecting, constructing, replacing or stabilizing all existing roadways, driveways and pavements of the various types encountered, removed or damaged under this Contract.

B. In addition, all existing utility castings, including valves boxes, junction boxes, handholes, pull boxes, inlets and similar structures in the areas of trench restoration, pavement replacement and pavement overlay shall be adjusted by the Contractor to bring them flush with the surface of the finished work.

1.0.2. QUALITY CONTROL

A. The phrase "FDOT Specifications" shall refer to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. The FDOT Specifications, are referred to herein and are hereby made a part of this Contract to the extent of such references, and shall be as binding upon the Contract as through reproduced herein in their entirety.

1.0.3. DAMAGE BY CONTRACTOR

A. The Contractor shall be responsible for the protection from damage from his construction operations, all pavements, including all base courses and surface courses, within the work area.

B. Payment for pavement restoration will be made only where such base courses or surface courses are encountered within the limits defined in the pavement repair details shown on the Plans and/or in the City Standard Details at the rear of the Specifications.

C. Any base course or surface course beyond those limits, damaged as a result of the Contractor's operation, shall be restored in accordance with the applicable requirements of these specifications, to the satisfaction of the City, and to the satisfaction of the governing authority having jurisdiction over the work area.

D. Any damage to adjacent lanes of pavement will require the Contractor to resurface the entire lane width for a length, as approved by the City. When the damage amounts to 25 percent or more in any one block (approximately 600 feet), the Contractor shall resurface the entire width of the lane in which the damage occurred for the entire block.

E. The Contractor is hereby notified that wherever the line for repaving for trenches extends one foot into the edge of the existing paving, he shall repave to this edge only. Full lane paving will not be required. Damage to the pavement beyond this line by the Contractor will require that he repave the full width.

F. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the City.

G. No payment shall be made for pavement restoration which falls outside the above described limits and is required for thrust blocks and other appurtenant items. The cost for such work shall be included in the price bid for the applicable item.

H. It is brought to the Contractor's attention that wherever the line of the nominal repaving for trenches extend to within two (2) feet of the edge of the existing paving, he shall repave to this edge.

PART 2 – PRODUCTS 2.0.1.

MATERIALS – GENERAL

A. Lime rock Base shall be as specified in Section 02526 "Concrete Pavement, Curb and Walkways".

B. Asphaltic Pavement, Prime Coat and Tack Coat shall be as specified Section 02750 "Asphaltic Concrete Pavement".

C. Sand cover material shall be clean and non-plastic, and shall be composed of hard durable grains, free from loam, silt rock particles and shall not contain any sticks, vegetation, grass, roots or organic matter. Local sand meeting such requirements may be used. Sand shall be subject to approval by the City.

D. 1:10 Mix: Sand-cement mix for backfill within state roads shall be a 1:10 mix of Type I or II Portland Cement and Sand that shall produce a slump of 4 to 6 inches.

2.0.2. BITUMINOUS PAVING MATERIAL

Asphalt cement for asphaltic concrete mixes shall be Viscosity Grade AC-20 or AC-30, homogeneous, free from water and shall meet the requirements of FDOT Specifications, Section 916-1. Unless otherwise specified, all test samples required shall be supplied by

the Contractor. For friction courses, in addition to meeting the above requirements, the bituminous material shall contain 0.5% of a heat-stable, anti-stripping additive from an approved source.

A. Asphaltic Concrete - Type S-I Mix shall meet the requirements of FDOT Specifications for Type S-I Asphaltic Concrete, Sections 330, 331 and 916 of FDOT Specifications.

B. Asphaltic Concrete - Type I Mix shall meet the requirements of Miami-Dade County Public Works Department Specifications for Type I Asphaltic Concrete Surface Course, Section 133 of the Public Works Manual.

C. Asphaltic Concrete - Type III Mix for asphaltic concrete wearing surface overlay, both machine laid and standard (skin patch), shall meet the requirements of FDOT Specifications for Type III Asphaltic Concrete, Section 333-1 through Section 333-6.

D. Type V paving repairs shall consist of a machine-laid asphaltic concrete wearing surface overlay, which shall be a nominal one-inch thick asphaltic concrete, meeting the material requirements of Type I repairs. See subsection 3.07, below.

E. Asphaltic Concrete - Type FC-1, FC-2, FC-3 and FC-4 shall meet the requirements of D.O.T Specifications for Friction Courses, Sections 337-1 through Section 337-7.

F. Emulsified Asphalt for Slurry Seal Coat shall be of the slow-setting, mixing type and shall be homogeneous, meeting the requirements of the Asphalt Institute, Grade SS1 or SS-1h.

G. Liquid Asphalt for Prime and Tack Coat: See Section 02741.

H. Liquid Asphalt for Sand and Asphalt Paving shall be asphalt cement, viscosity Grade AC-5 or emulsified asphalt, Grade RS-2 (anionic) conforming to the requirements of FDOT Specifications, Section 916-1 and 916-4, respectively.

I. Mineral Aggregate for Slurry Seal Coat shall consist of screened sand or limestone screenings or gray granite screenings or a mixture of sand and screenings plus not less than 3%, by weight, of Type I or Type II Portland cement.

PART 3 – EXECUTION

3.0.1. INSTALLATION – GENERAL

A. Permanent pavement repair shall be in accordance with the details shown in the Standard Details herein, with edges straight and parallel and patches rectangular in plan. Replace any paving, beyond the limits shown in the details and as called for in the specifications, as required. Where trenches are located out of the existing

pavement and damage occurs to the pavement, that pavement shall also be replaced by the Contractor.

B. Pavement markings removed or obliterated by the Contractor's operations shall be promptly replaced, in kind, to the satisfaction of the City of Opa-Locka Public Works Department.

C. All equipment necessary for construction shall be on the job site in first class working condition. Spilling or dropping of petroleum products is prohibited and all defective equipment shall be removed or replaced immediately. The Contractor shall be subject to all DERM (Department of Environmental Resources Management) regulations and clean up requirements.

D. The percentages of maximum density for subgrade and lime rock base specified herein are minimum. Greater percentages of maximum density shall be obtained, if so required, by the governing authority having jurisdiction over the work location.

E. Asphaltic concrete mixtures shall be obtained only from plants which comply with the requirements of FDOT Specifications, Section 320 as applicable, using materials specified herein, and producing the specified mixture. General construction requirements for all hot bituminous mixtures specified herein shall conform to FDOT Specifications, Section 330, as applicable.

I. Asphaltic concrete shall be laid only where the surface to be covered is intact, firm, cured and dry, and only when weather conditions are suitable. The temperature of the mixture at the time of spreading shall be within 25°F of the temperature set by the Engineer. No mixture shall be spread when the air temperature is less than 40°F nor when the spreading cannot be finished and compacted during daylight hours.

F. Any mixture caught in transit by a sudden rain may be laid at the Contractor's risk, if the base is in suitable condition. Under no circumstances shall asphaltic material be placed while rain is falling, or when there is water on the area to be paved.

G. Subgrade: Roadway subgrades shall be stabilized to the minimum depth shown on the drawings to a Lime rock Bearing Ratio of not less than 40. Stabilizing shall be Type B as defined in Section 160 of the FDOT Specifications. Stabilization may require the addition and thorough mixing in of crushed lime rock, course lime rock screenings, or any other stabilizing material acceptable to the City. The stabilizing material shall be applied in such quantity that, after mixing and blending, the subgrade will have a LBR of not less than 40. Stabilizing material shall be mixed or blended in the subgrade material by plowing, scarifying, disking, harrowing, blading and mixing with rotary tillers until the mixed materials are of uniform bearing value throughout the width and depth of the layer being processed.

H. At least three density determinations shall be made on each day's final compaction operations on each course, and the density determinations shall be made at more frequent intervals if deemed necessary by the City.

I. Lime rock Base: The lime rock base shall be constructed in accordance with Sections 200 and 911 of the FDOT Specifications, to the thickness and width indicated on the drawings.

J. After spreading of the base material is completed, the entire surface shall be scarified and shaped so as to produce the exact grade and cross section after compaction. For double course base, this scarifying shall extend a depth sufficient to penetrate slightly the surface of the first course. The maximum depth of each lift shall be 8-inches.

K. When the material does not have the proper moisture content to ensure the required density, wetting or drying shall be required. If the material is deficient in moisture, water will be added and uniformly mixed in by disking the base course to its full depth. If the material contains an excess of moisture, it shall be allowed to dry before being compacted. As soon as proper conditions of moisture are attained, the material shall be compacted to an average density not less than 98 percent maximum density as determined in more than one course, the density shall be obtained in each lift of the base.

L. During final compacting operations, if blading of any areas is necessary to obtain the true grade and cross section, the compacting operations for such areas shall be completed prior to making the density determination on the finished base.

M. Unless otherwise directed by the Engineer of Record, the surface shall be "hardplaned" with a blade grader immediately prior to the application of the prime coat to remove the thin glaze or cemented surface and to allow free penetration of the prime material. The materials planed from the base shall be removed from the base area.

N. If cracks or checks appear in the base, either before or after priming, which in the opinion of the City, would impair the structural efficiency of the base course, the Contractor shall remove such cracks or checks by rescarifying, reshaping, adding base material where necessary and recompacting.

O. Mixing Base and Subgrade: If at any time the subgrade material shall become mixed with the base course material, the Contractor shall, without additional compensation, dig out and remove the mixture, reshape and compact the subgrade and replace the materials removed with clean base material, which shall be shaped and compacted as specified above.

P. Asphaltic Concrete: The spreading, compacting and jointing the wearing surface shall be in accordance with Sections 330 and 331 of the FDOT Specifications to the thickness indicated on the drawings.

3.0.2. TEMPORARY PAVING

A. Prior to commencing excavation, the asphalt surface shall be saw-cut within the limits of the allowable trench width. Temporary paving will be required along the entire route where the original paved surface is removed. Unless otherwise approved by the City, temporary paving shall be placed the same day the trench is backfilled. The trench shall be backfilled up to a level 1 inch below the existing pavement surface and a temporary, cold mixed sand/asphalt pavement shall be constructed up to the level of the existing pavement surface. The liquid asphalt shall be Grade RC-70, conforming to the requirements of FDOT Specifications, Section 916-2. The sand shall conform to the requirements of FDOT Specifications, Section 902.3 for fine aggregate.

B. The cold mix is to be installed one block at a time, not crossing any intersection, or a maximum of 1,200 feet shall be completed before the Contractor may move forward with his excavation work. Backfill, compaction and temporary paving is to keep pace with the pipe installation. Written permission must be obtained from the City permitting the work to allow greater lengths than 1,200 feet. Permitting agencies may reduce the allowable limits in their permit, or for other unforeseen right-of-way conditions.

C. Prior to completion of the work and within a maximum of 30 calendar days, the Contractor shall remove the 1 inch of cold mix and surplus backfill. The Contractor shall replace it with the specified compacted lime rock base course and asphaltic within the specified working limits. Municipal agencies permitting this work may accelerate the time for removal of the cold mix, at their discretion.

D. The temporary pavement shall be maintained by the Contractor in a condition satisfactory to the City until its removal. Removal shall include any surplus backfill material. Replacement of the temporary pavement with permanent pavement shall be made within 30 days. In replacing the temporary paving with permanent pavement, all work shall be completed in sections compatible with specified traffic maintenance procedures.

E. The Contractor may elect to install a suitable temporary hot mix asphaltic pavement, to be left in-place, in lieu of cold mix, when the hot mix asphalt is left in-place and installed over properly compacted lime rock base course. This temporary pavement shall be incorporated into the specified permanent pavement restoration as part of Type I paving restoration.

F. Sand seal on the lime rock base course will not be permitted in lieu of temporary paving.

G. Unless otherwise approved by the City, temporary paving, shall be placed within twenty-four hours following the completion of backfilling.

3.0.3. TYPE I PAVING REPAIR (LIMEROCK BASE - ASPHALTIC CONCRETE SURFACE)

A. Type I paving repairs shall be made with an 8-inch thick compacted lime rock base and a minimum 1-inch thick asphaltic concrete surface, as detailed in the Standard Details. On Public Works roads asphaltic concrete shall have a compacted thickness of 2-inch, placed in a minimum of two (2) compacted 1-inch lifts.

B. Limerock for pavement base shall be Miami limerock obtained from local sources where the overburden was removed from the pits prior to mining operations. The limerock shall comply with the requirements of FDOT Specifications, Section 911.

C. The backfill previously placed and compacted shall be excavated to the required depth below the existing road surface and the existing paving shall be cut back beyond all excavations, using an abrasive disc saw to trim the edges to straight and true lines, minimum width for the lime rock base shall be equal to the trench width plus 2 feet. Eight inches of lime rock base shall be placed in two layers, each layer compacted to not less than ninety-eight percent (98%) density in accordance with Section 200 of FDOT Specifications. During rolling, the base shall be wetted down, as necessary, to secure the greatest possible compaction. After rolling, the entire surface of the base shall be thoroughly scarified to a depth of not less than 3 inches and shaped to conform to and be parallel with the existing surface, then watered and rolled again. Rolling and watering shall continue until the entire depth of the base is bonded and compacted into an unyielding mass.

D. If at any time the subgrade material becomes mixed with the lime rock base course materials, the Contractor shall, without additional compensation, dig out and remove the mixture, reshape and compact the subgrade and replace the materials removed with clean rock which shall be watered and rolled until satisfactorily compacted.

E. After the lime rock base course has been properly prepared and is dry and ready to receive the wearing surface, a tack coat of emulsified asphalt, in accordance with Section 02741, shall be applied at a rate of 0.10 gallon per square yard, immediately followed by the asphaltic concrete. The tack coat shall be applied to the entire lime rock base uniformly, and shall thoroughly coat all surfaced. Care shall be taken to tack coat and bond the edge of surrounding pavement.

F. The asphaltic concrete shall be plant mixed, using the best grade of local aggregates of approved size and gradation and mixed with an approved binder and conforming the either the State of Florida Department of Transportation Specifications, Type S-1 Asphaltic Concrete, Sections 330, 331 and 916 of FDOT Specifications, or Miami Dade County Public Works Type I, as ordered by the Engineer of Record.

G. Where the width of the repair permits, the asphaltic concrete plant mix material shall be placed by means of an approved mechanical spreader and finisher. The mixture shall be compacted to true grade and cross section by means of a tandem roller weighing not less than eight tons. The compacted asphaltic concrete mixture shall not be, in any case, less than one inch in thickness. Rolling shall proceed as closely behind the spreader as possible and all material shall be completely compacted the same day it is placed. The minimum width of the wearing surface shall be the same as the base.

3.0.4. TYPE IV PAVING REPAIRS (CONCRETE SLAB – RIGID PAVEMENT)

A. Type IV repairs will be used when the restoration work falls within the limits of existing rigid pavement.

B. Paving repairs shall be similar to Type III paving repairs except that No. 4 reinforcing steel bars spaced 12 inches on centers both ways shall be substituted for the mesh reinforcement, and the slab shall be 8 inches thick instead of 6 inches, with the top of the concrete matching the elevation and finish of the existing pavement. The asphaltic concrete surface course is not required.

3.0.5. TYPE V PAVING REPAIRS (ASPHALTIC CONCRETE WEARING SURFACE OVERLAY)

A. Type V paving repairs shall be made where noted on the plans and/or as ordered by the Engineer or Record. Type V paving repairs shall consist of a machine-laid asphaltic concrete wearing surface overlay, which shall be a nominal one-inch thick asphaltic concrete, meeting the material requirements of Type I repairs, as specified hereinabove. As used herein, "overlay" shall mean Type V paving repairs. A special wearing surface may be substituted, if required.

B. In general, the overlay shall be applied in a full lane width or widths, after the permanent paving repairs over the trench have been made. Type V is usually in addition to required Type I repairs. Since the quantity of Type V repairs that may be required is usually unknown until pavement restoration work begins, Type V repairs may be established in the Proposal on a contingent basis.

C. All longitudinal and transverse asphalt replacement overlay wearing surfaces shall butt into adjacent existing asphalt wearing surfaces in full lane asphaltic pavement restoration. The finish elevation of the new full lane overlay shall meet existing elevations adjacent to the new work.

D. The existing asphaltic concrete surface shall be saw cut for its full depth or 1-inch minimum, and then stripped back for at least 2 feet into the area to be overlaid to a second cut which shall also be in clean straight lines. The second, or interior, cut edge shall be rolled with a tandem roller weighing not less than 8 tons before the overlay is applied. The stripped area shall be used to provide a smooth transition or "feather"

area between the overlay and the existing pavement. Before placing the overlay, all cut edges and the surface of the stripped area shall be tack coated with emulsified asphalt as specified herein below.

E. If the Contractor requests in writing to "feather" the longitudinal edge, and if written permission is granted to "feather" the asphalt by the City a sanded mix of 70-30 type shall be used. "Feathering" shall begin 18 inches from the tapered edge.

F. Prior to installing a full lane width overlay over existing asphaltic pavement the trench and shoulders over the pipe shall be sawcut and filled with asphaltic concrete to the required depth, terminating flush with the existing adjacent asphalt in accordance with the municipality having jurisdiction over the work for Types I, II or M. Type V overlay will be installed as detailed above.

G. When a minor amount of asphalt surface will remain, generally with large pipe installations, after the pipe has been installed and the required longitudinal saw cutting of the asphaltic pavement completed, the Contractor may request permission to remove all the asphalt in the lane, by saw cutting the asphalt adjacent to the existing lane, then placing the Type V overlay flush with the adjacent asphalt. This would require that the Type I, II or M finish elevation be lowered 1 inch to allow for the Type V overlay.

H. Before the overlay is applied, existing surfaces shall be swept clean of all dirt and debris, using a power driven broom if warranted by the size of the location to be overlaid and/or as ordered by the City. Pavement edges shall be cleared of all encroaching vegetation, loose sand, rock and all other foreign matter. When the existing surface is thoroughly clean, a tack coat of Emulsified Asphalt Grade RS-2 (anionic) shall be applied at the rate of approximately 0.10 gallon per square yard, immediately followed by the asphaltic concrete overlay.

I. Machine-laid overlay shall be placed by means of an approved mechanical spreader and finisher, and the mixture shall be compacted to true grade and cross section by means of a tandem roller weighing not less than 8 tons.

J. The compacted overlay shall be thicker as required to produce a smooth uniform surface free of any irregularities but shall not be less than one inch in thickness. Existing depressed areas in the asphaltic pavement, which could collect water after a rainfall shall be corrected before placing the asphaltic overlay. Rolling shall proceed as close behind the spreading of the asphaltic overlay as possible, and all materials shall be completely compacted the same day it is placed.

3.0.6. SLURRY SEAL COAT

A. Slurry-seal repairs shall be made where ordered by the Engineer of Record or the City.

B. Before any material is laid, the existing surface shall be cleaned with brooms or power blowers. Vegetation which has overgrown the edges shall be removed. All cracks, potholes and depressions shall be brought up to grade with bituminous concrete skin patching.

C. A tack coat, if required, shall consist of emulsified asphalt SS-1h, diluted with 3 parts of water, sprayed and squeegeed or broomed at a rate of 0.1 to 0.2 gallons per square yard.

D. A minimum thickness of 1/8-inch to a maximum of 1/4-inch of slurry mix shall be spread by a drag distributor at a maximum rate of 180 feet per minute. Any ridges or surplus material shall be smoothed by hand squeegee. The pavement shall be kept damp with a fog spray just ahead of the machine.

E. A second coat shall not be applied to, nor traffic permitted to drive upon, the first application until it has thoroughly dried. (A dry condition is such that an automobile tire track does not show after driving on the surface).

3.0.7. ASPHALT COLD MILLING

A. Cold milling of the existing pavement for a 1-inch depth shall be done by using an automated pavement planer capable of maintaining an accurate depth. Cold milling equipment shall meet the approval of the Engineer and the governing agency having jurisdiction at the location of the pavement milling operation. The Engineer's word as to the acceptability of the equipment shall be final

B. After the pavement has been milled and the existing pavement removed, a tack coat shall be applied as specified above.

C. The required width of 1-inch thick asphaltic concrete wearing surface of the specified wearing course shall be applied in accordance with the above specifications.

D. The Contractor shall perform asphalt cold milling where called for on the plans or as required for a complete installation, when approved or requested by the City. Cold milling shall be done using an automated pavement planer capable of maintaining an accurate depth. Cold milling equipment shall meet the approval of the City and governing agency having jurisdiction at the location of the pavement milling operation. All charges for maintenance of traffic, transportation of personnel, equipment and other mobilization charges shall be considered as incidental to the cold milling operation.

E. Cold asphalt milling shall be provided to improve the rideability of the finished pavement, lower the finished grade adjacent to an existing curb prior to resurfacing or to completely remove existing pavement. The overall length of the milling machine (excluding the conveyor) shall be a minimum of 18 feet, and having a minimum cutting

width of six feet. The milling operation shall be operated to effectively minimize the amount of dust being emitted from the machine. Prewetting of the pavement may be required. In areas where milling is to be performed around the City utility structures such as manholes, valve boxes etc., proper caution shall be taken as not to damage any of the structures. Saw-cutting of the concrete surrounding the structure and using a pick or other means so as not to disturb the structure shall be employed to prevent any damage. Prior to opening an area which has been milled to traffic, the pavement shall be thoroughly swept with a power broom or other approved equipment to remove to the greatest extent practicable, the fine material which will dust under traffic. This operation shall be conducted in a manner so as to minimize the potential for creating a traffic hazard and to minimize air pollution.

F. The milling operation shall be continuous so as to complete each site without any delays. All milling operations shall be coordinated by the City Inspector.

G. Traffic maintenance charges shall include the installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Dade County Public Works Manual. In addition, the Contractor shall provide all barricades, flashing warning lights and/or arrow boards necessary to maintain safety and warn motorists of the construction.

3.0.8. REPAIR OF DAMAGED PAVEMENT

A. All damage to pavement by the Contractor as a result of Work under this project shall comply with "DAMAGE BY CONTRACTOR", above, and shall be repaired in a manner satisfactory to the City. The repair shall include the preparation of the subgrade, the placing and compacting of the lime rock base, the priming of the base, the placing and maintaining of the surface treatment, all as specified herein.

B. The width of all repairs within the work area shall extend at least 12 inches beyond the limit of the damage. The edge of the pavement to be left in place shall be cut to a true edge with a saw or other acceptable method so as to provide a clean edge to abut the repair. The line of the repair shall be uniform with no irregularities. Repair of damage by the Contractor beyond the work area shall be approved by the governing agencies having jurisdiction over the work prior to commencing the work.

3.0.9. CONCRETE PAVEMENT REPAIR

A. This type of repair shall be made only on Florida Department of Transportation roadways when the original pavement is concrete.

B. The existing pavement shall be saw cut in straight lines as outlined by the City at the location of the replacement. The pavement shall be removed and the fill shall be mechanically compacted to 98% of the maximum density obtainable as determined by AASHTO Standard T-180. The fill in the trench and shoulders shall be brought to a

depth equal to the thickness of the existing concrete pavement, but not less than 8 inches in any case. The opening thus formed, shall be filled with concrete having a design strength of 5,000 psi and made with High Early Strength Cement. The concrete slab shall be reinforced with ½ inch steel reinforcing rods, 12 inches on center each way, placed 2 inches above the bottom of the slab. The surface of the slab shall be struck off with a screed and finished with a wood float and brush to conform to the grade and finish of the existing pavement. Apply liquid curing compound after initial set. The Contractor shall provide adequate means to protect the slab until it has cured sufficiently to withstand vehicular traffic without spalling or breaking apart. Construction joints and expansion joints in the original pavement shall be reproduced in the repair with matching materials.

END OF SECTION

02765 PAVEMENT MARKINGS AND TRAFFIC SIGNS

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

This section consists of pavement markings and traffic signs on the Drawings, specified herein and as required for a complete installation.

1.0.2. QUALITY ASSURANCE

A. The phrase "DOT Specifications" shall refer to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. The DOT Specifications, are referred to herein and are hereby made a part of this Contract to the extent of such references, and shall be as binding upon the Contract as though reproduced herein in their entirety.

B. Pavement markings for this Project shall conform to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. Pavement markings removed or obliterated by the Contractor's operations shall be promptly replaced in kind to the satisfaction of the City of Opa-Locka Public Works Department, or other authority having jurisdiction over the work area.

1.0.3. CERTIFICATION

The Contractor shall furnish the manufacturer's certification that all signs furnished conform to these specifications and shall replace or repair at his expense all signs that fail to meet this requirement.

PART 2 - PRODUCTS

2.0.1. PAVEMENT MARKING

Paint for pavement strips shall be as specified in Part 3, Execution.

2.0.2. REFLECTIVE MARKERS

Reflective markers shall be installed in the pavement in accordance with OSHA, DOT and City of Opa-Locka Public Works requirements.

2.0.3. TRAFFIC SIGNS

A. General: Traffic regulating signs shall conform to the colors, dimensions and requirements of the Manual on Uniform Traffic Control Devices (ANSI) and displaying the lettering and symbols indicated on the Drawings.

B. Sign Panels and Support Members: Sign panels and support members shall conform to Aluminum Association Alloy 6061-T6.

C. Bolts: Bolts shall conform to Aluminum Association Alloy 2024-T4 with an anodic coating 0.0002-inches thick minimum and chromate sealed.

D. Nuts: Nuts shall conform to Aluminum Association Alloy 6269-T9.

E. Reflective Sheeting: Reflective sheeting shall conform to DOT Type A requirements.

F. Construction Warning Signs: The CONTRACTOR shall install traffic and warning signs during construction in accordance with OSHA, DOT and Dade County Public Works requirements.

PART 3 - EXECUTION

3.0.1. TRAFFIC PAINT

A. This type of pavement painting shall be used where no thermoplastic paint is required or as temporary paint during the time required for paving "cure" prior to application of thermoplastic paint markings.

B. Traffic paint used for this work shall conform with the requirements of Section 971-12 of the Florida Department of Transportation Standard Specifications for Road and bridge Construction, or, at the Contractor's option, fast dry traffic paint, as specified in D.O.T. Specifications, Section 971-13, may be used.

C. The colors of the paint shall be yellow or white, as existed before the repair.

D. All equipment shall be of a type and design which will readily produce the required uniformity of application of the stripes, both as to thickness of coating and alignment. The paint machine shall be of the spray type, capable of spraying the paint to the required "spread" without thinning of the paint. The paint tank shall be equipped with a mechanical agitator. The nozzle shall have cut-off valves which will apply broken or "skip" lines automatically. Each nozzle shall also be provided with suitable line guides, either metallic shrouds or air blasts.

E. Painting shall be done only during daylight hours and, as far as practicable, shall be terminated in time to permit sufficient drying by sunset. No paint shall be applied when moisture is present on the surface to be painted or when the air temperature is below 40 degrees

F. Painting shall not be done when winds are sufficient to cause spray dust. F. The surface which is to be painted shall be cleaned, by compressed air or other effective means, immediately before the start of painting, and shall be clean and dry when the

paint is applied. Any vegetation or soil shall be removed from the pavement before edge striping is begun.

G. The paint shall be thoroughly mixed before it is poured into the painting machine and no thinning of the paint will be allowed at any time. Before the start of each day's work, the paint container, the connections, and the spray nozzles on the machine shall be thoroughly cleaned with paint thinner or other suitable cleaner.

H. The traffic stripe shall be of the specified width, with clean, true edges and without sharp breaks in the alignment. A uniform coating of paint shall be obtained and the finished stripe shall contain no light spots or paint skips. Any stripes which do not have a uniform, satisfactory appearance, both day and night, shall be corrected.

I. All newly painted stripes, including edge stripes, shall be protected until the paint is sufficiently dry to permit vehicles to cross the stripe without damage from the tires. While the center line stripes are being painted, all traffic shall be routed away from the painting operations and the newly painted stripe. When necessary, a pilot car shall be used to protect the painting operations from traffic interference.

J. Any portions of the stripes damaged by passing traffic or from other causes shall be repainted.

K. Paint for temporary pavement markings shall also be used where thermoplastic markings are to be applied after the asphaltic concrete has "cured." The cure time shall be based on thermoplastic manufacturer's recommendations. However, in accordance with FDOT requirements, asphalt shall have been in place for 30 days before application of thermoplastic stripe.

3.0.2. THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS

A. Thermoplastic pavement markings, including stripes, pavement messages, stop bars, directional arrows, reflective pavement markers and other miscellaneous items, shall be replaced as existed before the repair was made. The thermoplastic compound shall be extruded or sprayed onto the pavement surface in a molten state by mechanical means, with surface application of glass spheres, when required. Upon cooling to ambient pavement temperature, the compound shall produce an adherent pavement marking of specified thickness and width and capable of resisting deformation.

B. The colors of the compound shall be white or yellow, as existed before the repair.

C. Where thermoplastic markings are to be applied to concrete pavement, a sealing primer, as specified in F.D.O.T. Specifications Section 711-2.2, shall be applied in advance of the placing of the stripes.

D. The thermoplastic shall be applied to the pavement utilizing either extrusion or spray application equipment. The application equipment shall be so constructed as to provide continuous mixing and agitation of the material. Conveying parts of the equipment between the main material reservoir and the shaping die or gun shall be so constructed as to prevent accumulation and clogging. The equipment shall be constructed so that all mixing and conveying parts up to and including the shaping die or gun, maintain the material at the plastic temperature with heat transfer oil or electrical element controlled heat. Direct fire heat transfer will not be allowed.

E. The application equipment shall be so constructed as to insure continuous uniformity in the dimensions of the stripe. The applicator shall provide a means for cleanly cutting off square stripe ends and shall provide a method of applying "skip" lines. The use of pans, aprons, or similar appliances which the die overruns will not be permitted.

F. Glass spheres applied to the surface of the completed stripe shall be applied by an automatic bead dispenser attached to the striping machine in such a manner that the beads are dispensed almost instantaneously upon the installed line.

G. Special kettle(s) shall be provided for melting and heating the thermoplastic material. The kettle(s) shall be equipped with automatic thermostatic control devises to provide uniform temperature control and prevent overheating of the material. The applicator and kettle(s) shall be equipped and arranged as to satisfy the requirements of the National Fire Underwriters, the State of Florida, Dade County and any municipal authority applicable to where the work is being done.

H. Applicators shall be mobile and maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. The applicator equipment to be used on roadway installations shall consist of either hand equipment or truck mounted units depending on the type of marking required.

I. The hand applicator equipment shall be insulated, have sufficient capacity to hold 150 pounds of molten material, and be sufficiently maneuverable to install crosswalks; lane, edge and center lines; arrows and legends.

J. The truck mounted unit for lane, edge and center lines shall consist of a mobile selfcontained unit carrying its own material capable of operating at a minimum speed of five miles per hour while installing striping.

K. Application time, weather limitations and surface preparation shall be in accordance with FDOT. Specifications Sections 710-4, 710-5 and 710-8. In accordance with FDOT requirements, asphalt shall have been in place for 30 days before application of thermoplastic stripe.

L. The material, when formed into traffic stripes or other markings, shall be readily renewable by placing an overlay of new material directly over an old line of compatible material in such a manner that no splitting or separation takes place.

M. The application temperature shall be within the range specified by the manufacturer of the thermoplastic compound being used.

N. All pavement edge lines, gore, island and diagonal strip markings, bike lane symbols and messages, wherever located, shall have a minimum thickness of 0.060 inch at the edges and a maximum thickness of 0.120 inch at the center. A minimum average film thickness of 0.060 inch shall be maintained. All lane lines, center lines, transverse markings (except shoulder markings) and pavement markings within traffic wearing area (such as dotted turning guide lines) shall have a minimum thickness of 0.090 inch at the edges and a maximum thickness of 0.188 inch at the center. A minimum average film thickness of 0.090 shall be maintained. All thickness measurements shall be an average in any three foot length.

O. The glass sphere top coating shall be applied by a type of glass sphere dispenser or gun which will embed the spheres into the line surface to at least one-half their diameter. The glass sphere top coating shall not incur more than a 10 percent loss during the first 30 days of traffic exposure.

P. Reflective pavement markers shall be installed as they existed before the repair. They shall be replaced with the appropriate color or colors and oriented in the correct direction as specified in Section 706 of the F.D.O.T. Specifications. Paving markings for this Project shall conform to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, as revised by the governing agency.

3.0.3. FABRICATION

Preparation of sign blanks and fabrication of reflectorized faces shall conform to the applicable requirements of DOT Sections 700-4 and 700-5.

END OF SECTION

02840 CONCRETE BARRIER

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

A. Construct precast or cast in place concrete barriers, traffic railings, opaque visual barriers, and parapets, herein referred to as rigid barrier, in accordance with the Standard Plans and the details shown in the Plans. Use stationary removable forms or sliding forms to construct the rigid barrier. Do not use permanent precast concrete rigid barrier on bridge or box culvert structures.

B. Submit written certification from the manufacturer of the precast rigid barrier that the barrier meets the requirements of this Section. Rigid barrier is produced using certification acceptance; therefore, assume responsibility for performance of quality control testing and inspections required by Sections 346 and 400 of FDOT's Standard Specifications Manual. Perform all Quality Control Testing and inspections using CTQP qualified testing personnel. Perform compressive strength testing in a laboratory inspected by CCRL or CMEC.

C. Ensure that each shipment of products to the job site includes a list of products shipped and the required written certification statement for each product. Submit this list and certifications to the Engineer.

PART 2 - PRODUCTS

2.0.1. MATERIALS

A. Meet the following requirements:

Flowable Fill .....Section 121
Concrete ..... Sections 346 and 347
Reinforcing Steel .....Section 415
Joint Materials..... 932-1.1
Joint Materials*..... 932-1.2 and 932-1.3 Barrier
Delineators *.....Sections 705

*Use products listed on the Department's Approved Product List (APL).

PART 3 - EXECUTION

3.0.1. CONSTRUCTION

A. General: The Contractor may use stationary removable forms or slip form construction methods provided a completed rigid barrier with acceptable alignment and finish is obtained. Do not use forms which are damaged or are not in alignment. At no expense to the Department, remove and replace sections of rigid barrier having unconsolidated concrete, surface blemishes, deviations in alignment or profile which exceed tolerances, or other defects which cannot be repaired to the satisfaction of the Engineer.

B. Stationary Form Construction: Provide precast or cast in place concrete rigid barrier constructed using stationary forms in accordance with Section 400 and provide a general surface finish. Align and erect the stationary form so that all plane surfaces of the finished barrier will have no deviation greater than 3/8 inch measured as an ordinate between the concrete and a 10 foot straightedge. Correct all alignment deviations greater than 3/8 inch. Straightedge by half lapping the straightedge for the full length of all plane surfaces.

C. Slip Form Construction: When electing to use the slip form method in lieu of the stationary forming method, place the concrete with a slip form machine approved by the Engineer. The concrete cover tolerance is plus or minus 3/4 inches from the plan dimensions, except the minimum concrete cover, as constructed, must not be less than 1-3/4 inches.

Provide a finished texture to the slip formed rigid barrier by hand troweling, brushing, or both to eliminate pockmarks, blemishes and any other discontinuities in surface texture. Ensure that the final finish has a fine texture and is free of pinholes, pockmarks, and blemishes.

Remove and recast or repair sections of slip formed rigid barrier having areas of unconsolidated concrete, having surface blemishes, and/or having pockmarks greater than 1/2 inch in diameter after hand troweling and brushing. Repair areas of unsatisfactory surface finish by hand methods using mortar screened from the concrete used to construct the rigid barrier. Use the mortar screened from the rigid barrier concrete only to fill holes and surface blemishes below the slip formed surface of the concrete. Do not use mortar as a surface overlay coating on the rigid barrier concrete.

During the finishing operation, while the concrete remains plastic, straightedge all plane surfaces of the slip formed rigid barrier with a 10 foot straightedge. Straightedge by half lapping the straightedge for the full length of the plane surfaces. Correct any deviation found during straightedging, greater than 3/8 inch, measured as an ordinate between the concrete surface and the straightedge, in an approved manner at no expense to the Department. Do not use surface overlay coatings of mortar screened from the concrete, or surface overlay coatings of concrete to correct alignment deviations.

3.0.2. JOINTS

A. General: Place expansion and contraction joints in concrete rigid barrier either mounted on or adjoining rigid structures in a manner similar to the type and method of jointing used in the supporting or adjoining structure or as shown in the Contract Documents. Place expansion and contraction joints in concrete rigid barrier supported by soil or flexible foundation materials in the manner detailed in the Plans.

B. Contraction Joints in Rigid Barrier Supported by or Adjoining Rigid Structures: The Contractor may form or saw contraction joints. When sawing contraction joints, saw them as soon as the concrete has hardened sufficiently to permit sawing without raveling and before uncontrolled cracking occurs, but in no case later than 12 hours after casting. Match contraction joints to adjacent contraction joints in the structure. Space contraction joints at 15 to 30 foot intervals. For rigid barrier on bridge structures or approach slabs, space contraction joints as shown in the Contract Documents.

C. Expansion Joints in Rigid Barrier Supported by or Adjoining Rigid Structures: Construct expansion joints at right angles to the face, and extend them through the entire crosssection of the rigid barrier. Construct expansion joints at the same location and width as the expansion joints in the structure on which the rigid barrier rests and at other locations shown in the Contract Documents. Form expansion joints with an expansion filler material or removable forming materials and secure to the forms as required to provide proper position.

3.0.3. REPAIRS AND REJECTION

A. For permanent precast concrete rigid barrier that has not been installed, evaluate cracks, spalls and other deficiencies in accordance with 450-12. Repair deficiencies in accordance with 450-13 or the plant's approved repair methods that are included as part of the Quality Control (QC) Plan. Ensure that the original performance and durability of the repaired rigid barrier is maintained. Use materials for concrete repair that will meet or exceed the strength requirement for the class of concrete used. Materials meeting the requirements of Section 930 may be substituted for non-shrink grout when required by 450-13. Concrete rigid barrier is subject to rejection if it fails to conform to any of the Specification requirements after repair. The disposition of concrete cracks in rigid barrier after installation shall be in accordance with 400- 21.

END OF SECTION

02900 LANDSCAPING

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

D. Work included in this Section includes tree removal, tree relocations, furnishing and planting trees, plants and grass of the species, sizes and quality specified, fertilizing, watering, maintaining plants, guarantee and obtaining all permits from municipalities having jurisdiction over this work.

E. The schedule of trees and plants, if applicable, is shown on the drawing, and indicates the common and botanical names, the quantities and sizes of plants to be used.

F. Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf with well developed root systems free of disease and insects, pests, eggs or larvae. No plants will be accepted unless healthy and showing satisfactory foliage conditions.

1.0.2. Solid sod and grass submittal to be submitted to the Engineer or Record for approval prior to installation.

PART 2 - PRODUCTS

2.0.1. GRASSING, SOLID SOD AND SEED:

A. General:

1. Solid sod shall be planted in the unpaved areas abutting the structures and extending to the limits shown on the Plans.

2. Grass seeding: All other unpaved areas shall be planted with grass seed and mulched.

3. When solid sod or grass seed is to be placed adjacent to or in close proximity to existing sod or grass, the Contractor is to use similar sod or grass and obtain approval from the Engineer of Record prior to installation. In public areas and rightof-ways the Contractor is also required to comply with Governmental Agency requirements and provide the City with written approval of said agency prior to installation of grass and sod.

B. Materials:

1. Solid Sod:
   a. Solid sod shall be certified bitter blue St. Augustine Floratam. The sod shall be firm touch texture having a compact growth of grass with good root development. It shall contain no weeds or other objectionable vegetation.

b. The soil embedded in the sod shall be good clean earth, free from stones and other debris. The sod shall be free from fungus, vermin and other diseases. The sod and soil shall be approximately 2" thick.

c. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be cut into uniform dimensions approximately 12" X 24". Abutting joints shall be free of open spaces with a tamped or rolled surface so that there are no joint openings.

2. Topsoil: Soil utilized for planting grasses shall be a mixture of pulverized 50% rock free siliceous sand and 50% clean mulch from an approved source. All ingredients shall be free of sticks, roots, rocks, lumps or other impurities or debris. All soil shall be delivered in a loose friable condition. Topsoil may be "unsuitable top soil" removed during the course of other work hereunder, if approved by the Engineer of Record. Topsoil shall be free of undesirable plants and seeds. Any such plants sprouting from areas of recent topsoil application shall be presumed to have originated in the topsoil and shall be eradicated from the area by the Contractor at his expense. Means of eradication shall be submitted to the Engineer of Record for approval.

C. Planting of Grassing:

1. Solid Sod: Unless otherwise directed by the Engineer, four inches of topsoil shall be placed. The ground area shall be saturated with water. Sod shall be placed on the graded and watered ground firmly butted on all sides by sod without leaving holes, slots, or depressions. Sod shall be top dressed with soil (herein before specified) where required to bring all fill to voids and provide a uniform grass matt if approved by the Engineer of Record. Soil shall firmly abut all structures to which it surrounds or contacts. Immediately after the grassing process, the entire grassed or mulched area shall be rolled thoroughly with a cultipacker traffic approved roller, or other 1,000 pound roller. At least two trips over the entire area will be required.

2. Grass Seeding: As above, place four inches of topsoil and saturate with water. Thereafter seed and mulch

D. Fertilizing Grassing:

1. Commercial fertilizers shall comply with all Federal, State and County fertilizer laws.

2. The numeral designations for fertilizer indicate the minimum percentage (respectively) of (1) total nitrogen, (2) available phosphoric acid, and (3) water soluble potash, contained in the fertilizer.

3. Designations may be approved specifically for a particular project and if liquid fertilizer other than that of chemical designation 8-8-8 is used, the total nitrogen content shall not exceed 12 percent.

4. At the Contractor's option liquid or dry fertilizer may be used. All grass shall be fertilized and watered in during the planting operation using the application rate and method directed by the manufacturer of the fertilizer used.

E. Guarantee and Maintenance of Grassing:

1. Guarantee:

a. The Contractor shall guarantee all grasses for a period of six months from the date of acceptance of the completed overall project from the Contractor.

b. The Contractor shall guarantee the grasses shall be alive, free of disease and have a healthy appearance at the end of the guarantee period.

c. During the guarantee period, the Contractor shall replace any grass which is diseased, dead or visually unsightly within 3 days when requested in writing.

2. Maintenance:

a. The Contractor shall maintain all grass guaranteed above for the period of the guarantee. Such maintenance shall include filling, leveling, and repairing eroded areas, replanting areas where the establishment of the grass does not develop satisfactorily, and watering as required. In no case shall such maintenance be less than 3 weeks for watering and 6 weeks for remaining maintenance care.

b. The maintenance of the grass shall include, regular mowing, one application of approved dry or liquid fertilizer to the grasses guaranteed above. The fertilizer shall be applied and watered in as directed by the manufacturer. The time of fertilizing shall be approved.

c. The Contractor shall be required under the maintenance of the guaranteed grasses to safeguard and take all possible precautions against damage from the elements and other possible damage. The Contractor shall be required to clean up the effected landscape area during the maintenance period due to any such event. The Contractor shall not be responsible to replace grasses

properly protected under this item of the specifications, damaged by the events beyond his control.

2.0.2. PLANTS AND TREES: (If required by relocation and if shown on the drawings)

A. Grade Standards and Quality:

1. Quality of all plants shall be at least equal to that defined as No. 1 by the State Plant Board of Florida in Grades and Standards for Nursery Plants, Part I, 1963 Revised Edition, and Part II, Palms and Trees.

2. All plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall have healthy, well developed root systems and shall be free of disease and insect pests, eggs or larvae.

3. No plants will be accepted unless they are healthy and show satisfactory foliage conditions.

4. All plants shall conform to the measurements specified or indicated on the Drawings except that up to 10 percent of undersized plants in any one variety or grade may be used provided there are sufficient oversized plants to make the average equal to or above specified grade. Plants larger than specified may be used if approved by the Engineer of Record, but use of such plants shall not increase the Contract price. The spread of roots or ball of earth for larger plants shall be increased in proportion to the size of the plant.

B. Plant Designation: With reference to method of cultivation, root system status, etc., plants for landscaping shall be classified under the following designations:

1. Balled and Burlapped:

a. Plants so classified shall be dug with firm natural root balls of earth, of sufficient diameter and depth to include most of the fibrous roots. The root ball of these plants shall be properly wrapped with burlap sack material and remain protected and moist until they are planted. Plants whose burlapped balls have cracked or become sagging, or plants showing scars from rope and cable marks or other improper handling are not acceptable. All balled and burlapped plants which cannot be planted immediately upon delivery shall be set on the ground and shall be well protected with soil, wet moss, or other acceptable material. The plants shall be set with the burlap cover intact and with the burlap showing, until inspection. At final inspection, the burlap may be cut away to ground level and completely covered with soil.

b. It is required that, balled and burlapped materials, 1½ inches or more in caliper, shall be root-pruned at least 45 days before being dug and such fact shall be certified on accompanying invoices. Where, in the opinion of the Engineer of Record following his inspection of the grower's stock, adequate root pruning is being obtained by the grower's general cultivating practices, he may consider such fact as meeting this requirement.

2. Wire Balled and Burlapped:

a. Plants grown in soil of a loose texture which does not readily adhere to the root system shall have sound hog wire placed around the burlapped ball before the plant is removed from the excavation. The wire shall be looped and tensioned until the burlapped ball is substantially packaged so as to prevent loosening of the soil around the roots during handling.

b. Wire balled and burlapped plants shall otherwise comply with the requirements for balled and burlapped plants described in 1 above.

3. Container Grown Plants:

a. Container grown plants shall have been grown in a container large enough and for sufficient time for the root system to have developed well enough to hold its soil together firm and whole. No plants shall be loose in the container. Plants which have become pot bound or for which the top system is too large for the size of the container, will not be acceptable.

b. All containers with vertical sides shall be cut and opened fully, in a manner such as will not damage the root system. Container grown plants shall not be removed from the container until immediately before planting, when all due care shall be taken to prevent damage to the root system.

4. Bare-Root Plants: No bare-root plants shall be used unless specifically required by the Engineer of Record or called for on the drawings.

5. Palms:

a. Palm species shall have the roots adequately wrapped before transplanting except when they are container grown. Burlapping will not be required if the palm is carefully dug from marl or heavy soil that it adheres to the roots and retains its shape without crumbling. During transporting and after arrival, root balls of palm shall be carefully protected from the wind and exposure to the sun. After delivery to the job site, if palm is not planted within 24 hours, the root ball shall be covered with a moist material.

b. All moving of sabal, coconut and royal palms shall be in accordance with Heavy Trunk Palms, as described in "Florida Grades and Standards for Nursery Plants, Part II".

6. Rooted Cuttings: Cuttings shall be kept moist at all times. They shall be rooted in a medium other than wood shavings and have at least 4 root tips of ½-inch or longer.

C. Transportation and Inspection:

1. Plant transportation shall comply with all Federal and State regulations therefor and, upon delivery at the site, all plants shall be inspected for conformity to specifications and for handling damage. Rejected plants shall be removed immediately from the site by the Contractor.

2. Foliage trees when moved in full leaf shall be treated with "Wilt Pruf" or "Plantguard", as they are loaded at their growing site. This material shall be applied to the entire tree with a fine spray at a dilution of 1 part "Wilt Pruf" or "Plantguard" to 15 parts of water.

3. Trees which have to be transported in excess of 10 miles to reach the job site, shall be covered with a 70 percent shade-cloth-tarp, or equal in order to prevent wind burn.

4. Immediately following the delivery and inspection at the job, all plants with exposed roots shall be heeled-in moist soil or peat moss. All plants heeled-in shall be properly maintained by the Contractor until planted.

5. The balls of balled and burlap plants, must, if not immediately planted after delivery and inspection, be adequately protected by covering until removed for planting, in a manner appropriate to prevailing conditions and in accordance with accepted horticultural practices. The Contractor shall, in loading, unloading, or handling of plants, exercise utmost care to prevent injuries to the branches or roots of the plants. The solidity of the ball of balled and burlapped plants shall be carefully preserved. Handling of the plant by parts other than the ball shall be cause for rejection of such plant. Bare root plants which have been heeled-in shall be properly handled during the distribution of planting beds.

D. Planting Materials:

1. Planting Soil: Planting soil shall be a pulverized mixture of 50% rock free siliceous sand and 50% clean mulch from an approved source. All ingredients shall be free of sticks, roots, rocks, lumps, or other impurities or debris. All soil shall be delivered in a loose friable condition.

2. Fertilizer:

   a. Fertilizer shall be as specified in subsection 2.01-D, herein.

   b. Fertilizer shall be selected and used as recommended by the manufacturer for each particular plant.

3. Mulch: Mulch shall be ground bark, bark peelings, peat, hay or straw. Cypress mulch shall not be used because its harvest degrades cypress wetlands.

4. Anti-Desiccant: Anti-desiccant shall be "Wilt Pruf", "Plantguard", or equal, delivered in the manufacturer's containers and used in accordance with the manufacturer's instructions.

5. Water:

   a. Water for the irrigation of the new plantings during the progress of construction shall be provided by the Contractor in accordance with the provisions previously specified.

   b. The Contractor shall furnish adequate watering equipment and shall continue watering to properly establish the new plantings throughout the maintenance period.

6. Wire: Wire for the bracing and guying shall be pliable No. 12 or No. 14 gauge galvanized soft steel wire.

7. Stakes and Ties: Stakes and ties shall be provided in accordance with the requirements of PART 3 EXECUTION, below.

PART 3 - EXECUTION

3.0.1. EXCAVATION OF PLANT HOLES:

A. Plant hole excavations shall be roughly cylindrical in shape, with the sides approximately vertical. Plants shall be centered in the hole, with the trunk location as shown in the Plans.

B. Bottoms of the holes shall be loosened at least 6-inches deeper than the required depth of excavation.

C. Holes for balled and burlapped and wire balled and burlapped plants shall be large enough to allow at least 8-inches of backfill around the earth ball. For root balls over 18-inches in diameter, this dimension shall be increased to 12-inches.

D. Where excess material has been excavated from the plant hole, the excavated material shall be disposed of as and where directed by the Engineer of Record.

E. PREPARATION OF GROUND

1. Four inches minimum thickness of topsoil shall be placed over the areas off the right of way on which the sod is to be placed.

F. APPLICATION OF FERTILIZER

1. Before applying fertilizer, the soil pH shall be brought to a minimum range of 6.0 - 7.0.

2. The fertilizer shall be spread uniformly over the area to be sodded at the rate of 500 pounds per acre, by a spreading device capable of uniformly distributing the material at the specified rate. Immediately after spreading, the fertilizer shall be mixed with the soil to a depth of approximately 4-inches.

3. On steep slopes, where the use of a machine for spreading or mixing is not practicable, the fertilizer shall be spread by hand and raked in and thoroughly mixed with the soil to a depth of approximately 2-inches.

G. PLACING SOD

1. The sod shall be placed on the prepared surface, with edges in close contact and shall be firmly and smoothly embedded by light tamping with appropriate tools. Sod areas abutting concrete, asphalt or other applicable surfaces shall have the soil depressed at edges of the pavements so that the cut grass does not protrude over 2-inches above the adjacent property.

2. Where sodding is used in drainage ditches, the setting of the pieces shall be staggered so as to avoid a continuous seam along the line of flow. Along the edges of such staggered areas, the offsets of individual strips shall not exceed 6-inches. In order to prevent erosion caused by vertical edges at the outer limits, the outer pieces of sod shall be tamped so as to produce a featheredge effect.

3. On steep slopes, the Contractor shall, if so directed by the Engineer of Record, prevent the sod from sliding by means of wooden pegs driven through the sod blocks into firm earth, at suitable intervals.

4. Sod which has been cut for more than 72 hours shall not be used unless specifically authorized by the Engineer of Record after his inspection thereof. Sod which is not planted within 24 hours after cutting shall be stacked in an approved manner and maintained and properly moistened. Any pieces of sod which, after placing, show an appearance of extreme dryness shall be removed and replaced by fresh, uninjured pieces.

5. Sodding shall not be performed when weather and soil conditions are, in the Engineer of Record's opinion, unsuitable for proper results.

H. WATERING

1. The areas on which the sod is to be placed shall contain sufficient moisture, as determined by the Engineer of Record, for optimum results. After being placed, the sod shall be kept in a moist condition to the full depth of the rooting zone for at least 2 weeks. Thereafter, the Contractor shall apply water as needed until the sod roots and starts to grow for a minimum of 60 days (or until final acceptance whichever is latest).

3.0.2. UNDERGROUND OBSTRUCTIONS:

A. In the event that rock, underground construction work, utility lines or obstructions out of the ordinary are encountered in any plant hole excavation, alternative locations will be selected by the Engineer of Record.

B. Where locations cannot be changed and the obstructions may be removed, the obstructions shall be removed to a depth of not less than 3-feet below grade and not less than 6-inches below bottom of balls or roots when plant is properly set at the required grade.

3.0.3. SETTING OF PLANTS:

A. When lowered into the hole, the plant shall rest on a prepared hole bottom such that the roots are level with, or slightly above, the level of their previous growth and so oriented such as to present the best appearance. The Contractor, when setting plants in holes, shall make allowances for any anticipated settling of the plants.

B. The backfill shall be made with planting mixture as specified hereinbefore and shall be firmly rodded and watered-in, so that no air pockets remain. The quantity of water applied immediately upon planting shall be sufficient to thoroughly moisten all the backfilled earth. Plants shall be kept in a moistened condition for the duration of the Contract.

3.0.4. STAKING AND GUYING:

A. When called for on the Drawings or directed by the City, plants shall be staked in accordance with the following provisions:

1. Small Trees: For trees and shrubs of less than 1-inch caliper, the size of stakes and the method of tying shall be such as to rigidly support the staked plant against damage caused by wind action or other effects. Trees larger than 1-inch and smaller than 1½ inch caliper shall be staked with a 2-inch square stake driven at least 24inches in the ground and extending to the crown of the plant. The plant shall be firmly fastened to the stake with two strands of 14 gauge soft wire, enclosed in rubber hose, or other approved covering. The wire shall then be nailed or stapled to the stake to prevent slippage.

2. Medium Trees: All trees, other than palm trees, larger than 1½-inch caliper and smaller than 2½-inch caliper shall be staked with two or more, 2-inch by 2-inch stakes, 8-feet long, set 2-feet in the ground. The tree shall be midway between the stakes and held firmly in place by two strands of 12 gauge wire, applied as specified above for single stakes. Tie wires shall be tightened and kept tight by twisting.

3. Large Trees: All trees, other palm trees, larger than 2½-inch caliper, shall be guyed from at least 3 points with double strands of 12 gauge wire. Guy wires shall be anchored to 2-inch by 4-inch stakes, 24-inches long, driven into the ground at least 2-feet and sufficient that the top of the stake is at least 3 inches below the finished ground level. In firm rock soils, No. 4 steel reinforcing rods or ½-inch pipe may be used instead of 2 by 4's. Tie wires shall be securely fastened to the tree by means of a collar of rubber hose, or other approved material. Guy wires shall be tightened and kept tight by twisting.

4. Palm Trees: Brace palm trees with three or more 2-inch by 4-inch wood braces, toenailed to cleats which are securely banded at two points to the palm, at a point at least 6-feet above the ground. The trunk shall be padded with five layers of burlap under the cleats. Braces shall be approximately equidistantly spaced and secured underground with 2-inch by 4-inch by 24-inch stake pads. In firm rocky soils, No. 4 steel reinforcing rods or ½-inch pipe is acceptable.

3.0.5. PRUNING:

All broken or damaged roots shall be cut off smoothly and the tops of all trees shall be pruned in a manner complying with standard horticultural practice. At the time pruning is completed, all remaining wood shall be alive. All cut surfaces of 1-inch or more in diameter, above the ground, shall be treated with an approved commercial tree paint.

3.0.6. MULCHING:

Within one week after the planting, mulch material, approved by the Engineer of Record, shall be uniformly applied to a minimum thickness of 2-inches, over the entire area of the backfilled hole or bed. The mulch shall be maintained continuously in place until the time of final inspection. Mulch is not required if other ground surface covers, such as rooted cuttings are called in the Plans.

3.0.7. INSPECTION:

On completion of the work, the Engineer of Record will inspect all planting work. The Contractor shall repair or replace all defective work, whichever is unsatisfactory to the Engineer of Record or the City. Preliminary acceptance of all plant materials will be given only after the materials are planted and after meeting all requirements prescribed herein.

3.0.8. MAINTENANCE:

A. Maintenance shall begin immediately after each plant is planted and shall continue until all work under this Contract has been completed and final acceptance is obtained from the City, however, the minimum period of this maintenance shall not be less than 60 days even if it extends beyond final acceptance of contract. Plants shall be watered, mulched, weeded, pruned, sprayed, fertilized, cultivated and otherwise maintained and protected. Settled plants shall be reset to proper grade position, planting saucer restored and dead material removed. Guys shall be tightened and repaired.

B. Defective work shall be corrected as soon as possible after it becomes apparent. Upon completion of planting, the Contractor shall remove from the site excess soil and debris, and repair any damage to structures, etc., resulting from planting operations.

3.0.9. GUARANTEE:

The Contractor shall guarantee all planting work for a period of six months after the date of final acceptance. During the guarantee period, the Contractor shall replace at no cost to the City any plant that dies or is not established within the guarantee period. Any plants missing or defective shall be furnished or replaced in a manner satisfactory to the City.

END OF SECTION

DIVISION 3 – CONCRETE

03300 CAST-IN-PLACE CONCRETE, REINFORCING AND FORMWORK

PART 1 – GENERAL 1.0.4.

SCOPE OF WORK

A. Provide all labor, materials, equipment, fabrication, incidentals, transportation, placing and supervision necessary to complete all cast-in-place concrete work, its finishing, and all related work called for by the Contract Drawings and/or specifications, or reasonably inferable from either or both, as needed for a complete and proper installation.

B. Work affecting this Section includes, but is not limited to:

1. Shop Drawings-Per General Conditions and as specified herein.
2. Materials and storage thereof.
3. Reinforcing-Bar and fabric.
4. Accessories of every nature, including form tie system.
5. Formwork and removal thereof, including shoring and reshoring.
6. Concrete proportions and mixes.
7. Placing of concrete.
8. Admixtures.
9. Joints, metal joint screeds and joint fillers.
10. Finishes of all types.
11. Protection and curing.
12. Patching.
13. Laboratory Testing.

1.0.5. QUALITY ASSURANCE

A. Unless otherwise indicated, all materials, workmanship and practices shall conform to the requirements of ACI 301-96 "Specifications for Structural Concrete for Buildings", except as modified by supplemental requirements hereinafter.

B. All reinforced concrete structures shall conform to ACI 301, ACI 302.1R, ACI 305, ACI 306, ACI 315, ACI 318, and ACI 350.

C. Concrete shall be composed of cement, fine aggregate, coarse aggregate, and water, so proportioned and mixed as to produce a plastic workable mixture in accordance with all requirements under this Section suitable to the specific conditions of placement.

D. Work shall be performed in accordance with Contract Documents, Drawings, and/or City of Opa-Locka Public Works Manual Specifications and Standard Details, in a neat and accurate manner. It is the intent of the City to obtain a complete and working installation according to these Specifications, and any items of labor, equipment, or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the project plans or stated herein.

1.0.6. STANDARDS

A. ACI 301-96 Specifications for Structural Concrete.

B. ACI 318-95 Building Code Requirements for Reinforced Concrete.

C. Florida Building Code, latest edition.

D. ACI 117-90 Standard Specifications for Tolerances for Concrete Construction and Materials

PART 2 – PRODUCTS

2.0.3. GENERAL

B. All reinforced concrete structures shall conform to ACI 301, ACI 302.1R, ACI 305, ACI 306, ACI 315, ACI 318, and ACI 350.

C. Concrete shall be composed of cement, fine aggregate, coarse aggregate, and water, so proportioned and mixed as to produce a plastic workable mixture in accordance

with all requirements under this Section suitable to the specific conditions of placement.

2.0.4. CEMENT

D. The cement shall be a standard brand of Portland cement manufactured within the continental limits of the United States. It shall meet the requirements of ASTM C150 "Portland Cement" and shall be Type II.

E. The total alkalies in the cement (calculated as the percentage of NA2O plus 0.658 times the percentage of K2O) shall not exceed 0.40%.

F. The proposed Portland Cement shall not contain more than 8% tricalcium aluminate and more than 12% tetracalcium aluminoferrite.

G. Different types of cement shall not be mixed nor shall they be used alternately except when authorized in writing by the City or their designee. Different brands of cement or the same brand from different mills may be used alternately. A resubmittal will be required if different cements are proposed during the Project.

H. Cement shall be stored in a suitable weather-tight building so as to prevent deterioration or contamination. Cement which has become caked, partially hydrated, or otherwise damaged will be rejected.

2.0.5. FLY ASH

A. If fly ash is used as supplementary cementitious material, it shall meet the physical and chemical requirements of ASTM C618 Class F, except that the loss of ignition shall not exceed 4%. Sampling and testing of fly ash shall follow the requirements of ASTM C311.

B. For Type A1 concrete as required for use in environmental engineering concrete structures, inclusion of fly ash or slag cement in the concrete mix is mandatory

2.0.6. SLAG CEMENT

D. Slag cement shall meet the requirements of ASTM C989 including tests for effectiveness of slag in preventing excessive expansion due to alkali-aggregate reactivity as described in Appendix X-3 of ASTM C989.

E. For Type A1 concrete as required for use in environmental concrete structures, i.e., process structures or fluid containing structures, inclusion of fly ash or slag cement in the concrete mix, is mandatory.

2.0.7. WATER

B. The water used in mixing the concrete shall be from potable water supplies that are approved by the Florida Department of Health.

2.0.8. AGGREGATES

A. Fine Aggregate (Sand) in the various concrete mixes shall consist of natural or manufactured siliceous sand, clean and free from deleterious substances, and graded within the limits of ASTM C33.

B. Coarse Aggregate: Coarse aggregate shall consist of gravel, broken stone or local limerock. Coarse aggregate shall be size #57 or #67 as graded within the limits given in ASTM C33 unless otherwise specified. It shall be free from adherent coatings.

C. Aggregates shall be tested for gradation by sieve analysis tests in conformance with ASTM C136.

D. When tested for soundness in accordance with ASTM C88, the loss resulting after five cycles shall not exceed 10 percent for fine or coarse aggregate when using either magnesium sulfate or sodium sulfate.

E. When tested in accordance with "Potential Reactivity of Aggregates (Chemical Method)" (ASTM C289), the ratio of silica released to reduction in alkalinity shall not exceed 1.0.

F. When tested in accordance with "Organic Impurities in Sands for Concrete" (ASTM C40), the fine aggregate shall produce a color in the supernatant liquid no darker than the reference standard color solution.

G. When tested in accordance with "Resistance to Abrasion of Small size Coarse Aggregate by Use of the Los Angeles Machine" (ASTM C131), the coarse aggregate shall show a loss not exceeding 42 percent after 500 revolutions, or 10.5 percent after 100 revolutions.

2.0.9. ADMIXTURES

A. Air entraining agent shall be added to all concrete unless noted otherwise. The agent shall provide entrained air in the concrete in accordance with ASTM C260.

B. The following admixtures are required or used for water reduction, slump increase, and/or adjustment of initial set. Admixtures permitted shall confirm to the requirements of ASTM C494. Admixtures shall be non-toxic after 30 days and shall be compatible with and made by the same manufacturer as the air-entraining admixtures.

1. Water reducing admixture shall conform to ASTM C494, Type A and shall contain no more than 0.05% chloride ions. Acceptable products are "Eucon Series" by the Euclid Chemical Company, "Master Pozzolith Series" by BASF, and "Plastocrete Series" by Sika Corporation.

2. High range water reducer shall be sulfonated polymer conforming to ASTM C494, Type F or G. The high range water reducer shall be added to the concrete at either the batch plant or at the job site and may be used in conjunction with a water reducing admixture. The high range water reducer shall be accurately measured and pressure injected into the mixer as a single dose by an experienced technician. A standby system shall be provided and tested prior to each day's operation of the job site system. Concrete shall be mixed at mixing speed for a minimum of 100 mixer revolutions after the addition of the high range water reducer. Acceptable products are "Eucon 37" or Plastol 5000 by the Euclid Chemical Company, "Master Rheobuild 1000 or Master Glenium Series" by BASF, and "Daracem 100 or Advaflow Series" by W.R. Grace. High range water reducer shall be mandatory for class A1 concrete intended for placement in walls.

3. A non-chloride, non-corrosive accelerating admixture may be used where specifically approved by the City or their designee. The admixture shall conform to ASTM C494, Type C or E, and shall not contain more chloride ions than are present in municipal drinking water. The admixture manufacturer must have longterm noncorrosive test data from an independent testing laboratory (of at least a year's duration) using an acceptable accelerated corrosion test method such as that using electrical potential measures. Acceptable products are "Accelguard 80/90 or NCA" by the Euclid Chemical Company and "Daraset" by W.R. Grace.

4. A water reducing retarding admixture may be used where specifically approved by the Engineer. The admixture shall conform to ASTM C494, Type D and shall not contain more than 0.05% chloride ions. Acceptable products are "Eucon NR or Eucon Retarder 100" by the Euclid Chemical Company, "Pozzolith Retarder" by BASF, and "Plastiment" by Sika Corporation.

C. Admixtures containing calcium chloride, thiocyanate or more than 0.05 chloride ions are not permitted

C. Portland cement and reinforcing steel: Comply with ACI 301 and, with all modifications and supplements thereto listed in Part 3 of this specifications.

2.0.10. CONCRETE MIX DESIGN

A. The proportions of cement, aggregates, admixtures, and water used in the concrete mixes shall be based on the results of field experience or preferably laboratory trial

mixes in conformance with Section 5.3. "Proportioning on the Basis of Field Experience and/or Trial Mixtures" of ACI 318 and ACI 350. When trial mixes are used, they shall also conform to Article 3.01 of this Section of the Specifications. If field experience records are used, concrete strength results shall be from concrete mixed with all of the ingredients proposed for use on job used in similar proportions to mix proposed for use on job. Contractor shall submit verification confirming this stipulation has been followed. Field experience records and/or trial mix data used as the basis for the proposed concrete mix design shall be submitted to the City or their designee along with the proposed mix.

B. Structural concrete shall conform to the following requirements. Cementitious materials refer to the total combined weight of all cement, fly ash, and slag cement contained in the mix.

1. Compressive Strength (28 day)

CONCRETE CLASS	COMPRESSIVE STRENGTH
Concrete Class A1	4,500 psi (minimum)
Concrete Class A2	4,000 psi (minimum)
Concrete Class B	3,000 psi (minimum)

2. Water/cementitious materials ratio, by weight

CONCRETE CLASS	MAXIMUM	MINIMUM
Concrete Class A1	0.42	0.39
Concrete Class A2	0.45	0.39
Concrete Class B	0.50	0.39

3. Slump Range

   a. 4" nominal unless high range water reducing admixture is used.

   b. 8" max if high range water reducing admixture is used

4. Air Content

CONCRETE CLASS	COMPRESSIVE STRENGTH
Concrete Class A1, A2	6% ± 1.5%
Concrete Class B	3% Max (non air-entrained)

2.0.11. REINFORCING STEEL

A. Bar reinforcing shall conform to the requirements of ASTM A615 for Grade 60 Billet Steel reinforcing. All reinforcing steel shall be from domestic mills and shall have the manufacturer's mill marking rolled into the bar which shall indicate the producer, size, type, and grade. All reinforcing bars shall be deformed bars. Smooth reinforcing bars shall not be used unless specifically called for on Drawings.

B. Reinforcing supports shall include all necessary chairs, slab bolsters, concrete blocks, tie wires, dips, supports, spacers, and other devices to position reinforcing during concrete placement. Wire bar supports shall be plastic protected (CRSI Class 1).

C. Precast concrete blocks to space and support the reinforcing bars may be used to support and position bottom reinforcing steel. Use concrete blocks with a strength equal to or greater than the concrete in which they are to be placed and have wires cast into them for fastening to the reinforcing bars. Moist-cure the blocks for at least three days.

D. Reinforcing steel shall be accurately positioned as shown on the Drawings and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or plastic protected (CRSI Class 1) metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. Where concrete is to be placed on the ground, supporting concrete blocks (or dobies) shall be used in sufficient numbers to support the reinforcing bars without settlement. In no case shall concrete block supports be continuous.

E. All reinforcement shall be entirely free of rust, scale, grease, or other coating which might destroy or reduce its bond with the concrete.

F. Reinforcing of curbs and gutters shall be in accordance with City of Opa-Locka Public Works Manual Standard Details.

G. Welded wire fabric reinforcing shall conform to the requirements of ASTM A1064. Welded wire fabric shall be 6X6-W1.4xW1.4 steel to be used in all sidewalks and driveways

2.0.12. REINFORCING STEEL

A. Bar reinforcing shall conform to the requirements of ASTM A615 for Grade 60 Billet Steel reinforcing. All reinforcing steel shall be from domestic mills and shall have the manufacturer's mill marking rolled into the bar which shall indicate the producer, size, type, and grade. All reinforcing bars shall be deformed bars. Smooth reinforcing bars shall not be used unless specifically called for on Drawings.

B. Reinforcing supports shall include all necessary chairs, slab bolsters, concrete blocks, tie wires, dips, supports, spacers, and other devices to position reinforcing during concrete placement. Wire bar supports shall be plastic protected (CRSI Class 1).

C. Precast concrete blocks to space and support the reinforcing bars may be used to support and position bottom reinforcing steel. Use concrete blocks with a strength equal to or greater than the concrete in which they are to be placed and have wires cast into them for fastening to the reinforcing bars. Moist-cure the blocks for at least three days.

D. Reinforcing steel shall be accurately positioned as shown on the Drawings and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or plastic protected (CRSI Class 1) metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. Where concrete is to be placed on the ground, supporting concrete blocks (or dobies) shall be used in sufficient numbers to support the reinforcing bars without settlement. In no case shall concrete block supports be continuous.

E. All reinforcement shall be entirely free of rust, scale, grease, or other coating which might destroy or reduce its bond with the concrete.

F. Curbs and gutters shall be in accordance with Miami Dade County or FDOT's Standard Details.

G. Welded wire fabric reinforcing shall conform to the requirements of ASTM A1064. Welded wire fabric shall be 6X6-W1.4xW1.4 steel to be used in all sidewalks and driveways.

2.0.13. FORMS

A. Burlap mats: Conform to AASHTO Specification M182. (Burleen non-staining mats.)

B. Epoxy bonding agent: A two (2) component, solvent free, moisture insensitive structural epoxy adhesive conforming to ASTM C881 Type II, Sikadur 32 Hi-Mod, as manufactured by Sika Corp., Concresive 1090 Liquid by Master Builders or approved equal.

C. Anchor bolts, nuts and washers shall be American made 316 stainless steel.

D. Dovetail slots: Galvanized steel, 22 gauge, 1"x 1", with 5/8" throat, fiber filled.

E. Forms:

1. Plywood Forms: PS-1, B-B Concrete Form, Class I, exterior type, mill oiled and edge sealed. Thickness shall be as required to support concrete at the rate placed, but not less than 3/4".

2. Steel Forms: Uncoated steel, 3/16"-inch minimum thickness, fabricated to close tolerances, protected only by the specified release agent, braced so as not to dent, bend or dimple under wet concrete loads, vibrator impact and tool impact. Maintain steel forms in rust free condition by use of steel wool and light grinding, followed by coats of the specified release agent. Forms should be adjustable to be brought into true alignment without steps or ridges.

F. Form release agent:

1. For plywood forms use a natural non-petroleum base, non-staining and nonretarding release agent that will effectively prevent absorption of moisture and prevent bond with concrete and leaves the concrete with a paintable surface.

2. For steel forms, use an approved material that will not stain, color or otherwise affect the finish of the concrete. Form coating shall not be detectable on finished surfaces.
3. Round column forms: Provide seamless fiber forms with the three plies nearest to the interior surface of the form deckled or scarfed and overlapped to minimize spiral gaps or seams on the column surface.

G. Form Ties: Steel rod type with integral waterstops and cones, and with ends or end fasteners that can be removed without spalling the concrete and which leave a hole equal in depth to the required reinforcement clearance, but not less than 2 inches from the formed face of the concrete. Wire tie, banding wire and wood spreaders will not be permitted.

H. Form Inserts:

1. Bevel or chamfer strips: Wood or non-staining plastic, 3/4" wide on each leg at exposed edges of concrete members, unless otherwise noted on plans.

2. Tongue and Groove Joint Forms: Minimum 24 gauge with steel stakes and splice plates. Forms shall be designed for joints not to receive a poured seal.

3. Pipe hangers and other utility supports: AISI Type 316 stainless steel.

2.0.14. MORTAR

A. Standard premixed mortar conforming to ASTM C387, Type S, or proportion 1 part Portland cement to 2 parts clean, well-graded sand which will pass a 1/8-inch screen. Portland Cement shall conform ASTM C150.

B. Sand shall conform to AASHTO M45.

C. Admixtures may be used not exceeding the following percentages of weight of cement:

1. Hydrated lime: 10 percent

2. Diatomaceous earth or other inert materials: 5 percent.

D. Consistency of mortar shall be such that it will readily adhere to concrete

2.0.15. GROUT

A. Non-Shrink Grout: Non-shrink, non-metallic grout conforming to ASTM C 1107 Grade B or Grade C only. Grout must meet ASTM C 1107 at a temperature range of 50 F to 90 F at a flowable consistency. A minimum compressive strength of 5,000 pounds per square inch (psi) shall be obtained at 28 days.

B. Grout for Surface Repair and Bond Coat:

1. For repair, one part Portland cement to two parts fine sand, and a 50%of water and 50% Acryl 60 or equal (Thoroseal or Acryl Set Bonding Agent by Master Builders) to produce a stiff mortar.

2. For bond coat, one part Portland cement to one part sand, and a 50% of water and 50% Acryl 60 or equal (Thoroseal or Acryl Set Bonding Agent) to produce a slurry mix.

C. Moisture Barrier: Kraft paper and glass reinforcing fibers sandwiched between 2 layers of polyethylene film with a permeance rating of maximum 0.1 as per ASTM E-96, Procedure A.

D. Expansion Joint Filler:

1. Preformed expansion joint filler shall be of the non-extruding and resilient bituminous type and conform to the requirements of AASHTO Designation M 213.

2. Expansion joint filler shall be gray neoprene sponge rubber that conforms to AASHTO Designation M 153, Type I.

Q. Joint Sealant Compound: Non-sag, 2 component, solvent free, moisture insensitive, flexible, epoxy resin conforming to the requirements ASTM C920-87 Type M, Grade NS. Additionally, the sealant must be recommended by the manufacturer to perform under continuous immersion in water.

R. Polyurethane Elastomeric Sealant: Sikaflex-2c, NS/SL or approved equal. Provide a 2- component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a non-sag and self-leveling consistency. Sealant shall meet ASTM C-920 and Federal Specifications TT-S-00227E.

1. Joint Movement: +50%.

S. Waterstops:

1. Polyvinyl chloride (PVC): Conforming to the requirements of U.S. Army Corps of Engineers Specification CRD-C-572 and of the following type:

a. Expansion Joints: 9-inches by 3/8-inch, ribbed center bulb.

b. Construction Joint: 9-inches by 3/8-inch, flat ribbed.

c. Only where specified on plans at construction and expansion joints: 9-inches by 3/8-inch, split ribbed.

2. Thermoplastic butt splices shall be performed using approved prefabricated pretested fittings; do not lap splice waterstops.

3. Waterstops for impermeable joints between prefabricated structures Non-hydro expansive based on bituminous resins to seal horizontal and vertical joints; hydrostatic load resistance 7 m column of water; not soluble in water; flashpoint 315degree Celsius ASTM D92; elongation capacity at 20 degree Celsius 230% compared to its initial dimension. Suitable for tunnels, water treatment plants, sewage, septic tanks, tanks, pipelines, sewer trunk lines and for any prefabricated concrete structure in general.

T. Fiber Reinforcement: Fiber reinforcement shall not be used in the concrete unless ordered buy the Engineer in writing. It shall consist of 100% virgin polypropylene fibrillated fiber dosage of 2 lbs. per cubic foot.

1. Compressive Strength: 1 psi (.006895 M Pa), ASTM C-39.

2. Flexural Strength: 288 psi (2.0 M Pa) after 7 days, 390 psi (2.7 M Pa) after 28 days; ASTM C-78.

3. Splitting Tensile Strength: 194 psi (1.3 M Pa) after 7 days, and 290 psi (2.0 M Pa) after 28 days; ASTM C-496.

4. Source: Fiber mesh Micro-Reinforcement System by Fiber mesh Company, Division of Synthetic Industries, Inc. Or approved equal.

U. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Engineer.

V. A shrinkage reducing admixture (Teraguard) or equivalent at the rate of 2.2% by weight of cement may be used in the concrete to meet the shrinkage limitations.

W. To protect the concrete slab against the elements, the Engineer may direct the Contractor to spray an evaporation retarder on the finished concrete slab immediately behind the cement finishing process at no additional cost to the City. This is not a curing compound.

PART 3 – EXECUTION 3.0.1.

READY MIX CONCRETE

A. Concrete obtained from a ready-mix plant shall conform to the requirements of these Specifications, and all applicable portions of ASTM C94 "Ready-Mixed Concrete".

3.0.2. MIXING AND DELIVERING CONCRETE

D. Produce a completely uniform mixed concrete in a truck mixer for 70 to 100 revolutions at the mixing speed designated by the truck manufacturer.

E. Prior to starting the discharge of the concrete at the jobsite, when water is added, record the added quantity and mix the concrete 30 additional drum mixing revolutions. Do not make more than two mix adjustments. Seek approval from the Engineer prior to using a central mixer and depositing the batch into a truck mixer.

F. Transit Time Using Agitator Trucks: The maximum allowable transit time between the initial introduction of water into the mix and completely discharging all the concrete from the truck will be 60 minutes. The maximum transit time can be 90 minutes if water reducing and retarding admixture (Type D, Type G, or Type II) is used. Reject concrete exceeding the maximum transit time.

G. All the concrete in a load must be in its final placement position a maximum of 15 minutes after the transit time has expired unless a time extension is approved by the Engineer.

H. Adding Water to Concrete at the Placement Site: Water may be added at the placement site provided the addition of water does not exceed the water to cementitious materials ratio as defined by the mix design. After adding water, perform a slump test to confirm the concrete is within the slump tolerance range stated in Section 2.01. If the slump is outside the tolerance range, reject the load. If an adjustment is made at the concrete production facility, perform a slump test on the next load to ensure the concrete is within the slump tolerance range. Do not place concrete represented by slump test results outside of the tolerance range. Include water missing from the water storage tanks upon arrival at the project site in the jobsite water added

3.0.3. PLACING CONCRETE

B. Weather Restrictions

1. Concreting in Cold Weather: Do not place concrete when the air temperature at placement is below 40°F. The requirements of concreting in cold weather do not apply to precast concrete mixing and placement operations occurring in a temperature-controlled environment.

2. Concreting in Hot Weather: Hot weather concreting is defined as the production, placing, and curing of concrete when the concrete temperature at placing exceeds 85°F but is less than 100°F . Unless the specified hot weather concreting measures are in effect, reject concrete exceeding 85°F at the time of placement. Concrete temperature shall be measured per ASTM C1064. Regardless of special measures taken, reject concrete exceeding 100°F. Predict the concrete temperatures at placement time and implement hot weather measures to avoid production shutdown.

B. Inspections Before Placing Concrete: Do not place concrete until the depth and character of the foundation and the adequacy of the forms and falsework have been approved by the Engineer. Do not deposit any concrete until all reinforcement is in place and has been inspected and approved by the Engineer.

C. Exposure to Water: Do not expose concrete other than seal concrete in cofferdams to the action of water before final setting. Do not expose such concrete to the action of salt or brackish water for a period of seven days after placing the concrete. Protect the concrete during this period by keeping salt or brackish water pumped out of cofferdams.

D. Deposit concrete as nearly as possible in its final position. Do not deposit large quantities at one point and then run or work it along the forms. Take special care to fill each part of the forms, to work coarse aggregate back from the face, and to force concrete under and around reinforcing bars without displacing them.

E. Use a method and manner of placing concrete that avoids the possibility of segregation or separation of aggregates. If the Engineer determines that the quality of concrete as it reaches its final position is unsatisfactory, remove it and discontinue or adjust the method of placing until the Engineer determines that the quality of the concrete as placed is satisfactory.

F. Use metal or metal-lined open troughs, chutes, or other means of concrete conveyance which have no aluminum parts in contact with the concrete. As an exception, chutes made of aluminum for ready mixed concrete trucks, no longer than 20 feet, may be used. This exception does not apply to any other means of concrete conveyance. Where steep slopes are required, use chutes that are equipped with baffles or are in short lengths that reverse the direction of movement. Where placing operations would involve dropping the concrete freely more than 5 feet, deposit it through pipes, troughs, or chutes of sheet metal or other approved material. Use troughs, chutes, or pipes with a combined length of more than 30 feet only with the City"s authorization. Keep all troughs, chutes, and pipes clean and free from coatings of hardened concrete by thoroughly flushing them with water after each run or more often if necessary.

G. Place concrete against supporting material that is moist at the time of concrete placement. If additional water is required, uniformly apply it ahead of the concrete placement as directed by the Engineer. The Contractor may use a moisture barrier in lieu of controlling the foundation grade moisture when approved by the Engineer.

H. Place concrete in continuous horizontal layers, approximately 20 inches thick. To avoid obtaining a plane of separation or a cold joint between layers, vibrate the concrete.

I. Vibrate concrete to avoid honeycomb and voids, especially at construction joints, expansion joints, valleys, and ends of form sheets. Use approved pouring sequences.

J. Do not use calcium chloride or any other admixture containing chloride salts in the concrete.

K. The concrete shall be placed on stabilizing or compacted subgrade to such depth that, when it is consolidated and finished, the slab thickness required by the Drawings will be obtained at all points and surface will at no point be below the grade specified for the finished surface, after application of the allowable tolerance. The concrete shall be deposited on the stabilized subgrade in a manner which will require as little re-handling as possible. Placing of the concrete shall be continuous between transverse joints, without the use of intermediate bulkheads.

L. Concrete shall be thoroughly consolidated against and along the faces of all forms, and along the full length and on both sides of all joint assemblies, by means of hand operated, vibrators. Vibrators shall not be permitted to come in contact with joint assembly, the subgrade, or a side form. Vibration at any one location shall not continue so long as to produce puddling or the accumulation of excessive grout on the surface. In no case shall the vibrator be operated longer than 15 seconds in any one location.

M. Coloring of concrete shall be done by dry-mixing the compound and broadcasting over the fresh-poured concrete after it has been struck off.

N. Placing of concrete shall be so regulated that the pressure caused by the wet concrete shall not exceed that used in the design of the forms.

O. All concrete for walls shall be placed through openings in the form spaced at frequent intervals or through tremies (heavy duct canvas, rubber, etc.), equipped with suitable hopper heads. Tremies shall be of variable lengths so the free fall shall not exceed five (5) feet and a sufficient number shall be placed in the form to ensure the concrete is kept level at all times.

P. When forms are removed, surfaces shall be even and dense, free from aggregate pockets or honeycomb. To achieve this, concrete shall be consolidated using mechanical vibration, supplemented by forking and spading by hand in the corners and angle of forms and along form surfaces while the concrete is plastic under the vibratory action. Consolidation shall conform to ACI 309.

Q. Care shall be taken to prevent cold joints when placing concrete in any portion of the work. The concrete placing rate shall be such as to ensure that each layer is placed while the previous layer is soft or plastic, so that the two layers can be made monolithic by penetration of the vibrators. Maximum thickness of concrete layers shall be 18 inches. The surface of the concrete shall be level whenever a run of concrete is stopped.

R. Placement in Wall Forms: Concrete shall not be dropped through reinforcement steel or into any deep form, whether reinforcement is present or not, causing separation of the coarse aggregate from the mortar on account of repeatedly hitting rods or the sides of the form as it falls, nor shall concrete be placed in any form in such a manner as to leave accumulation of mortar on the form surfaces above the placed concrete. In such cases, some means such as the use of hoppers and, if necessary, vertical ducts of canvas, rubber, or metal shall be used for placing concrete in the forms in a manner that it may reach the place of final deposit without separation. In no case shall the free fall of concrete exceed 4 feet below the ends of ducts, chutes, or buggies. Concrete shall be uniformly distributed during the process of depositing, and in no case after depositing shall any portion be displaced in the forms more than 6 feet in horizontal direction. Concrete in forms shall be deposited in uniform horizontal layers not deeper

than 2 feet; and care shall be taken to avoid inclined layers or inclined construction joints where such are required for sloping members. Each layer shall be placed while the previous layer is still soft. The rate of placing concrete in forms shall not exceed 5 feet of vertical rise per hour.

3.0.4. FORMWORK

A. Forms to confine the concrete and shape it to the required lines shall be used wherever necessary. The Contractor shall assume full responsibility for the adequate design of all forms, and any forms which are unsafe or inadequate in any respect shall promptly be removed and replaced at the Contractor 's expense. All design, construction, maintenance, preparation, and removal of forms shall be in accordance with the FBC, ACI 347 and the requirements specified herein.

B. All forms shall be true in every respect to the required shape and size, shall conform to the established alignment and grade, and shall be of sufficient strength and rigidity to maintain their position and shape under the loads and operations incident to placing and vibrating the concrete.

C. Vertical Surfaces: All vertical surfaces of concrete members shall be formed, except where placement of the concrete against the ground is called for by the Engineer.

D. Construction Joints: Concrete construction joints will not be permitted at locations other than those shown or specified, except as may be acceptable to the Engineer. When a second lift is placed on hardened concrete, special precautions shall be taken in the way of the number, location, and tightening of ties at the top of the old lift and bottom of the new to prevent any unsatisfactory effect whatsoever on the concrete.

E. Form Ties: Wire ties for holding forms will not be permitted. No form-tying device or part thereof, other than metal, shall be left embedded in the concrete. Ties shall not be removed in such manner as to leave a hole extending through the interior of the concrete members. The use of snap-ties which cause spilling of the concrete upon form stripping or tie removal will not be permitted. If steel panel forms are used, rubber grommets shall be provided where the ties pass through the form in order to prevent loss of cement paste. Where metal rods extending through the concrete are used to support or to strengthen forms, the rods shall remain embedded and shall terminate not less than 1 inch back from the formed face or faces of the concrete.

F. Careful procedures for the removal of forms shall be strictly followed, and this work shall be done with care so as to avoid injury to the concrete. No heavy loading on green concrete will be permitted. Members which must support their own weight shall not have their forms removed until they have attained at least 75 percent of the 28day strength of the concrete as specified herein. Forms for all vertical walls and columns shall remain in place at least 2 days after the concrete has been placed. Forms for all

parts of the Work not specifically mentioned herein shall remain in place for periods of time as determined by the City or their designee.

3.0.5. REINFORCING STEEL

A. Reinforcing steel shall be accurately formed to the dimensions and shapes shown on the Drawings, and the fabricating details shall be prepared in accordance with ACI 315 and ACI 318, except as modified by the Drawings.

B. Bending or Straightening: Reinforcement shall not be straightened or rebent in a manner which will injure the material. Bars with kinks or bends not shown shall not be used. All bars shall be bent cold, unless otherwise permitted by the Engineer. No bars partially embedded in concrete shall be field-bent except as shown or specifically permitted by the Engineer.

C. Reinforcing steel shall be accurately positioned as shown on the Drawings and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. Where concrete is to be placed on the ground, supporting concrete blocks (or dobies) shall be used, in sufficient numbers to support the bars without settlement, but in no case shall such support be continuous. All concrete blocks used to support reinforcing steel shall be tied to the steel with wire ties which are embedded in the blocks. For concrete over formwork, the Contractor shall furnish concrete, metal, plastic, or other acceptable bar chairs and spacers.

D. The portions of all accessories in contact with the formwork shall be made of concrete, plastic, or steel coated with a 1/8-inch minimum thickness of plastic which extends at least 1/2 inch from the concrete surface. Plastic shall be gray in color.

E. Tie wires shall be bent away from the forms in order to provide the specified concrete coverage.

F. Bars additional to those shown which may be found necessary or desirable by the Contractor for the purpose of securing reinforcement in position shall be provided by the Contractor at its own expense.

G. Reinforcement placing tolerances shall be within the limits specified in ACI 318, unless otherwise directed by the Engineer.

H. Welded wire fabric reinforcement placed over horizontal forms shall be supported on slab bolsters having gray, plastic-coated standard type legs as specified herein. Slab bolsters shall be spaced not less than 30 inches on centers, shall extend continuously

across the entire width of the reinforcing mat, and shall support the reinforcing mat in the plane shown.

I. Welded wire fabric placed over the ground shall be supported on wired concrete blocks (dobies) spaced not more than 3 feet on centers in any direction. The construction practice of placing welded wire fabric on the ground and hooking into place in the freshly placed concrete shall not be used.

J. Reinforcement bar splices shall only be used at locations shown. When it is necessary to splice reinforcement at points other than where shown, the character of the splice shall be as acceptable to the City or their designee.

K. Lap length for reinforcement bars shall be in a Class B Splice in accordance with ACI 318, unless otherwise shown. Laps of welded wire fabric shall be in accordance with the ACI 318.

L. Reinforcing steel shall at all times be protected from conditions conducive to corrosion until concrete is placed around it.

M. The surfaces of all reinforcing steel and other metalwork to be in contact with concrete shall be thoroughly cleaned of all dirt, grease, loose scale and rust, grout, mortar, and other foreign substances immediately before the concrete is placed. Where there is a delay in depositing concrete, reinforcing shall be reinspected and, if necessary, recleaned.

3.0.6. PREPARATION OF SURFACES FOR CONCRETING

A. General: No concrete shall be placed until the reinforcement steel and formwork have been erected in a manner acceptable to the City or their designee. The Contractor shall notify the City or their designee not less than two working days prior to concrete placement, allowing for inspection and any corrective measures which are required. Earth surfaces shall be thoroughly wetted by sprinkling, prior to the placing of any concrete, and these surfaces shall be kept moist by frequent sprinkling up to the time of placing concrete thereon. The surface shall be free from standing water, mud, and debris at the time of placing concrete.

B. Joints in Concrete: Concrete surfaces upon or against which concrete is to be placed, where the placement of the old concrete has been stopped or interrupted so that, as determined by the City or their designee, the new concrete cannot be incorporated integrally with that previously placed, are defined as construction joints. The surfaces of horizontal joints shall be given a compacted, roughened surface for good bond. Except where the Drawings call for joint surfaces to be coated, the joint surfaces shall be cleaned of all laitance, loose or defective concrete, and foreign material. Such cleaning shall be accomplished by sandblasting, followed by thorough washing. All

pools of water shall be removed from the surface of construction joints before the new concrete is placed.

C. Existing concrete surfaces upon or against which concrete is to be placed shall be given a roughened surface for good bond. Joint surfaces shall be cleaned of all laitance, loose or defective concrete, and foreign material. Such cleaning shall be accomplished by Thydroblasting. All pools of water shall be removed from the surface of construction joints before the new concrete is placed.

D. Placing Interruptions: When placing of concrete is to be interrupted long enough for the concrete to take a set, the working face shall be given a shape by the use of forms or other means that will secure proper union with subsequent work, provided that construction joints shall be made only where acceptable to the City or their designee.

E. Embedded Items: No concrete shall be placed until all formwork, installation of parts to - be embedded, reinforcement steel, and preparation of surfaces involved in the placing have been completed and accepted by the City or their designee at least 4 hours before placement of concrete. All surfaces of forms and embedded items that have become encrusted with dried grout from concrete previously placed shall be cleaned of all such grout before the surrounding or adjacent concrete is placed.

F. All reinforcement, anchor bolts, sleeves, inserts, and similar items shall be set and secured in the forms where shown on the Drawings or by shop drawings and shall be acceptable to the City or their designee before any concrete is placed. Accuracy of placement is the responsibility of the City or their designee.

G. Casting Against Old Concrete: Where concrete is to be cast against old concrete (any concrete which is greater than 60 days of age), the surface of the old concrete shall be thoroughly cleaned and roughened by hydro-blasting (exposing aggregate) prior to the application of an epoxy bonding agent. Application shall be according to the bonding agent manufacturer's instructions and recommendations.

H. No concrete shall be placed in any structure until all water entering the space to be filled with concrete has been properly cut off or has been diverted by pipes, or other means, and carried out of the forms, clear of the work. No concrete shall be deposited under water nor shall the Contractor allow still water to rise on any concrete until the concrete has attained its initial set. Water shall not be permitted to flow over the surface of any concrete in such manner and at such velocity as will injure the surface finish of the concrete.

I. Openings for pipes, inserts for pipe hangers and brackets, and the setting of anchors shall, where practicable, be provided for during the placing of concrete.

J. Corrosion Protection: Pipe, conduit, dowels, and other ferrous items required to be embedded in concrete construction shall be so positioned and supported prior to

placement of concrete that there will be a minimum of 2 inches clearance between said items, and any part of the concrete reinforcement will not be permitted.

K. Cleaning: The surfaces of all metalwork to be in contact with concrete shall be thoroughly cleaned of all dirt, grease, loose scale and rust, grout, mortar, and other foreign substances immediately before the concrete is placed.

3.0.7. TAMPING AND VIBRATING

A. As concrete is placed in the forms or in excavations, it shall be thoroughly settled and compacted, throughout the entire depth of the layer which is being consolidated, into a dense homogeneous mass, filling all comers and angles, thoroughly embedding the reinforcement, eliminating rock pockets, and bringing only a slight excess of water to the exposed surface of concrete during placement. Vibrators shall be high speed power vibrators (8,000 or 10,000 rpm) of an immersion type in sufficient number and with (at least one) standby units as required.

B. Concrete in walls shall be internally vibrated and at the same time rammed, stirred, or worked with suitable appliances, tamping bars, shovels, or forked tools until it completely fills the forms or excavations and closes snugly against all surfaces. Subsequent layers of concrete shall not be placed until the layers previously placed have been worked thoroughly as specified. Vibrators shall be provided in sufficient numbers, with standby units as required, to accomplish the results herein specified with 15 minutes after concrete of the prescribed consistency is placed in the forms. The vibrating head shall be kept from contact with the surfaces of the forms. Care shall be taken not to vibrate concrete excessively or to work it in any manner that causes segregation of its constituents.

3.0.8. FINISHING CONCRETE SURFACE

A. General: Surfaces shall be free from fins, bulges, ridges, offsets, honeycombing, or roughness of any kind, and shall present a finished, smooth, continuous hard surface. Allowable deviations from plumb or level and from the alignment, profiles, and dimensions shown on the Drawings are defined as tolerances and are specified herein. These tolerances are to be distinguished from irregularities in finish as described herein. Aluminum finishing tools shall not be used.

B. Formed Surfaces: After removal of forms, the finishes described below shall be applied in accordance with Article 3.13, D. Unless the finish schedule specifies otherwise, all surfaces shall receive at least a Type I finish. The Engineer shall be the sole judge of acceptability of all concrete finish work.

1. Type I - Rough: All fins, burrs and other projections left by the forms shall be removed. All holes left by removal of ends of ties, and all other holes, depressions, or voids shall be filled solid with cement grout after first being thoroughly wetted.

Honeycombs shall be chipped back to solid concrete as directed, prior to patching with cement grout. Holes shall be filled with a small tool that will permit packing the hole solidly with cement grout. Cement grout shall consist of one part cement to three parts sand, and the amount of mixing water shall be as little as consistent with the requirements of handling and placing. Color of cement grout shall match the adjacent wall surface. At locations where concrete coatings are specified to be applied, epoxy-based patch material or filler surfaces compatible with the coating shall be used in lieu of cement grout specified herein. Concrete finish shall be in strict conformance to the coating / paint manufacturer's recommendations.

2. Type II - Grout Cleaned: Where this finish is required, it shall be applied after completion of Type I finish. After the concrete has been predampened, slurry consisting of one part cement (including an appropriate quantity of white cement in order to produce a color matching the surrounding concrete) and 1-1/2 parts sand passing the No. 16 sieve, by damp loose volume, shall be spread over the surface with clean burlap pads or sponge rubber floats. Any surplus shall be removed by scraping and then rubbing with clean burlap. The finish shall be kept damp for at least 36 hours after application.

3. Type III - Smooth Rubbed: Where this finish is required, it shall be applied after the completion of the Type I finish. No rubbing shall be done before the concrete is thoroughly hardened and the mortar used for patching is firmly set. A smooth, uniform surface shall be obtained by wetting the surface and rubbing it with a carborundum stone to eliminate irregularities. Unless the nature of the irregularities requires it, the general surface of the concrete shall not be cut into. Corners and edges shall be slightly rounded by the use of the carborundum stone. Brush finishing or painting with grout or neat cement will not be permitted.

C. Unformed Surfaces: The finishes described below shall be applied to unformed surfaces such as floors, slabs, flow channels and top of walls in accordance with Article 3.05 - Concrete Finish Schedule. The Engineer shall be the sole judge of acceptability of all such finish work.

1. Type "A" - Screeded: This finish shall be obtained by placing screeds at frequent intervals and striking off to the surface elevation required. When a Type "F" finish is subsequently to be applied, the surface of the screeded concrete shall be roughened with a concrete rake to ½" minimum deep grooves prior to final set.

2. Type "B" - Wood Floated: This finish shall be obtained after completion of a Type "A" finish by working a previously screeded surface with a wood float until the desired texture is reached. Floating shall begin when the water sheen has disappeared and when the concrete has sufficiently hardened so that a person's foot leaves only a slight imprint. If wet spots occur, water shall be removed with a squeegee. Care shall be taken to prevent the formation of laitance and excess water on the finished surface. The finished surface shall be true, even, and free from blemishes and other irregularities.

3. Type "C" - Cork Floated: This finish shall be similar to Type "B" but slightly smoother than that obtained with a wood float. It shall be obtained by power or band floating with cork floats.

4. Type "D" - Steel Troweled: This finish shall be obtained after completion of a Type "B" finish. When the concrete has hardened sufficiently to prevent excess fine material from working to the surface, the surface shall be compacted and smoothed with not less than two thorough and complete steel troweling operations. In areas, which are to receive a floor covering such as tile, resilient flooring, or carpeting, only one troweling operation is required. The finish shall be brought to a smooth, dense surface, free from defects and blemishes.

5. Type "E" - Broom or Belt: This finish shall provide the surface with a transverse scored texture by drawing a broom or burlap belt across the surface immediately after completion of a Type "B" finish.

6. Type "F" - Swept in Grout Topping: This finish shall be applied after a completion of a Type "A" finish. The concrete surface shall be properly cleaned, washed, and coated with a mixture of water and Portland Cement. Cement grout in accordance with Section 03315 shall then be plowed and swept into neat conformance with the blades or arms of the apparatus by turning or rotating the previously positioned mechanical equipment. Special attention shall be paid to true grades, shapes and tolerances as specified by the manufacturer of the equipment. Before beginning this finish, the Contractor shall notify the Engineer and the equipment manufacturer of the details of the operation and obtain approval and recommendations of the equipment manufacturer.

7. Type "G" - Hardened Finish: Either a liquid hardened finish or an aggregate hardened finish shall be provided at the Contractor's option.

8. Type "H" - Non-Slip Finish: This finish shall be provided by applying a non-slip shake-on aggregate concurrently with the application of a Type "D" finish. Application procedure shall be in accordance with manufacturer's instructions.

9. Type "J" - Raked Finish: This finish shall be provided by raking the surface as soon as the condition of the concrete permits by making depressions of +/-1/4-inch.

3.0.9. CONCRETE FINISH SCHEDULE

ITEM	TYPE OF FINISH

Inner face of walls of tanks, flow channels, wet wells, perimeter walls, and miscellaneous structures to be coated	I
Exterior concrete walls below grade	I
Exterior exposed concrete walls and columns (including top of II wall) to one foot below grade. All other exposed concrete surfaces not specified elsewhere	
All interior exposed concrete vertical surfaces in buildings	III
Interior exposed ceiling, including beams	III
Floors of process equipment tanks or basins, and slabs to receive roofing material or waterproof membranes	B

All interior finish floors of buildings and structures and walking surfaces which will be continuously or intermittently wet	C
All interior finish floors of buildings and structures which are not continuously or intermittently wet	D
Floors to receive tile, resilient flooring, or carpeting	D
Concrete in flow channels not specified to be coated	D
Exterior concrete sidewalks, steps, ramps, decks, slabs on grade and landings exposed to weather	E
Floors of process tanks indicated on Drawings or in the specifications to receive cement grout topping	F
Precast concrete form panels, hollow core planks, double tees	J

3.0.10. CURING AND DAMP PROOFING

A. All concrete shall be cured for not less than 14 days after placing, in accordance with the methods specified herein for the different parts of the work and described in detail in the following paragraphs.

SURFACE TO BE CURED OR DAMPPROOFED	METHOD
Unstripped forms	1
Construction joints between footings and walls, and between floor slab and columns	2
Encasement concrete and thrust blocks	3
All concrete surfaces not specifically provided elsewhere in this paragraph	4

B. Method 1: Wooden forms shall be wetted immediately after concrete has been placed and shall be kept wet with water until removed. If steel forms are used, the exposed concrete surfaces shall be kept continuously wet until the forms are removed. If forms are removed within 14 days of placing the concrete, curing shall be continued in accordance with Method 4.

C. Method 2: The surface shall be covered With burlap mats which shall be kept wet with water for the duration of the curing period, until the concrete in the walls has been placed. No curing compound shall be applied to surfaces cured under Method 2.

D. Method 3: The surface shall be covered with moist earth not less than 4 hours, nor more than 24 hours, after the concrete is placed. Earthwork operations that may damage the concrete shall not begin until at least 7 days after placement of concrete.

E. Method 4: The surface shall be sprayed with a liquid curing compound. It shall be applied in accordance with the manufacturers printed instructions at a maximum coverage rate of 200 square feet per gallon and in such a manner as to cover the surface with a uniform film which will seal thoroughly.

F. Care shall be exercised to avoid damage to the seal during the curing period. Should the seal be damaged or broken before the expiration of the curing period, the break shall be repaired immediately by the application of additional curing compound over the damaged portion.

G. Wherever curing compound may have been applied by mistake to faces against which concrete subsequently is to be placed and to which it is to adhere, said compound shall be entirely removed by hydroblasting just prior to the placing of new concrete.

H. Curing compound shall be applied as soon as the concrete has hardened enough to prevent marring on uniformed surfaces, and within 2 hours after removal of forms from contact with formed surfaces. Repairs required to be made to formed surfaces shall be made within the said 2-hour period; provided, however, that any such repairs which cannot be made within the said 2-hour period shall be delayed until after the curing compound has been applied. When repairs are to be made to an area on which curing compound has been applied, the area involved shall first be wet-sand blasted to remove the curing compound, following which repairs shall be made as provided herein.

3.0.11. TESTING

A. Field Testing of Concrete

1. The Contractor shall coordinate with the Engineer's project representative the onsite scheduling of the materials testing consultant personnel as required for concrete testing.

2. Concrete for testing shall be supplied by the Contractor at no additional cost to the Owner, and the Contractor shall provide assistance to the materials testing consultant in obtaining samples. The Contractor shall dispose of and clean up all excess material.

C. Consistency

1. The consistency of the concrete will be checked by the materials testing consultant by standard slump cone tests. The Contractor shall make any necessary adjustments in the mix as the Engineer and/or the materials testing consultant may direct and shall upon written order suspend all placing operations in the event the consistency does not meet the intent of the specifications. No payment shall be made for any delays, material, or labor costs due to such eventualities.

2. Slump tests shall be made in accordance with ASTM C143. Slump tests will be performed as deemed necessary by the materials testing consultant and each time compressive strength samples are taken.

3. Concrete with a specified nominal slump shall be placed having a slump within 1" (higher or lower) of the specified slump. Concrete with a specified maximum slump shall be placed having a slump less than the specified slump.

D. Unit Weight

1. Samples of freshly mixed concrete shall be tested for unit weight by the materials testing consultant in accordance with ASTM C138.

2. Unit weight tests will be performed as deemed necessary by the Engineer and each time compressive strength samples are taken.

E. Air Content

1. Samples of freshly mixed concrete will be tested for entrained air content by the materials testing consultant in accordance with ASTM C231.

2. Air content tests will be performed as deemed necessary by the materials testing consultant and each time compressive strength samples are taken.

3. In the event test results are outside the limits specified, additional testing shall occur. Admixture quantity adjustments shall be made immediately upon discovery of incorrect air entrainment.

F. Compressive Strength

1. Samples of freshly mixed concrete will be taken by the materials testing consultant and tested for compressive strength in accordance with ASTM C172, C31 and C39, except as modified herein.

2. In general, one sampling shall be taken for each placement, with a minimum of one (1) sampling for each day of concrete placement operations, or for each one

fifty (50) cubic yards of concrete, or for each 5,000 square feet of surface area for slabs or walls, whichever is greater.

3. Each sampling shall consist of at least five (5) 6x12 cylinders or eight (8) 4x8 cylinders. Each cylinder shall be identified by a tag, which shall be hooked or wired to the side of the container. The materials testing consultant will fill out the required information on the tag, and the Contractor shall satisfy himself that such information shown is correct.

4. The Contractor shall be required to furnish labor to the Owner for assisting in preparing test cylinders for testing. The Contractor shall provide approved curing boxes for storage of cylinders on site. The insulated curing box shall be of sufficient size and strength to contain all the specimens made in any four consecutive working days and to protect the specimens from falling over, being jarred or otherwise disturbed during the period of initial curing. The box shall be erected, furnished, and maintained by the Contractor. Such box shall be equipped to provide the moisture and to regulate the temperature necessary to maintain the proper curing conditions required by ASTM C31. Such box shall be located in an area free from vibration such as pile driving and traffic of all kinds and such that all specimens are shielded from direct sunlight and/or radiant heating sources. No concrete requiring inspection shall be delivered to the site until such storage curing box has been provided. Specimens shall remain undisturbed in the curing box until ready for delivery to the testing laboratory but not less than sixteen hours.

5. The Contractor shall be responsible for maintaining the temperatures of the curing box during the initial curing of test specimens with the temperature preserved between 60°F and 80°F as measured by a maximum-minimum thermometer. The Contractor shall maintain a written record of curing box temperatures for each day curing box contains test specimens. Temperature shall be recorded a minimum of three times a day with one recording at the start of the workday and one recording at the end of the workday.

6. When transported, the cylinders shall not be thrown, dropped, allowed to roll, or be damaged in any way.

7. Compression tests shall be performed in accordance with ASTM C39. For 6x12 cylinders, two test cylinders will be tested at seven days and two at 28 days. For 4x8 cylinders, three test cylinders will be tested at seven days, three at 28 days. The remaining cylinders will be held to verify test results, if needed.

G. Evaluation and Acceptance of Concrete

1. Evaluation and acceptance of the compressive strength of concrete shall be according to the requirements of ACI 214, ACI 318, and ACI 350.

2. The strength level of concrete will be considered satisfactory if all of the following conditions are satisfied.

    a. Every arithmetic average of any three consecutive strength tests equals or exceeds the minimum specified 28-day compressive strength for the mix (see Article 2.08). b. No individual compressive strength test results falls below the minimum specified strength by more than 500 psi.

3. In the event any of the conditions listed above are not met, the mix proportions shall be corrected for the next concrete placing operation.

4. In the event that condition 2B is not met, additional tests in accordance with Article 3.10, paragraph H shall be performed.

5. When a ratio between 7-day and 28-day strengths has been established by these tests, the 7-day strengths shall subsequently be taken as a preliminary indication of the 28-day strengths. Should the 7-day test strength from any sampling be more than 10% below the established minimum strength, the Contractor shall:

    a. Immediately provide additional periods of curing in the affected area from which the deficient test cylinders were taken.

    b. Maintain or add temporary structural support as required.

    c. Correct the mix for the next concrete placement operation, if required to remedy the situation.

6. All concrete which fails to meet the ACI requirements and these specifications is subject to removal and replacement at no additional cost to the Owner.

H. When non-compliant concrete is identified, test reports shall be sent immediately to the Engineer for review.

I. Additional Tests

1. When ordered by the Engineer, additional tests on in-place concrete shall be provided and paid for by the Contractor.

2. In the event the 28-day test cylinders fail to meet the minimum strength requirements as outlined in Article 3.10, paragraph F, the Contractor shall have concrete core specimens obtained and tested from the affected area immediately.

    a. Three cores shall be taken for each sample in which the strength requirements were not met.

b. The drilled cores shall be obtained and tested in conformance with ASTM C42. The tests shall be conducted by a materials testing consultant approved by the Engineer.

c. The location from which each core is taken shall be approved by the Engineer. Each core specimen shall be located, when possible, so its axis is perpendicular to the concrete surface and not near formed joints or obvious edges of a unit of deposit.

d. The core specimens shall be taken, if possible, so no reinforcing steel is within the confines of the core.

e. The diameter of core specimens should be at least 3 times the maximum nominal size of the coarse aggregate used in the concrete but must be at least 2-inches in diameter.

f. The length of specimen, when capped, shall be at least twice the diameter of the specimen.

g. The core specimens shall be taken to the laboratory and when transported, shall not be thrown, dropped, allowed to roll, or damaged in any way.

h. Two (2) copies of test results shall be mailed directly to the Engineer. The concrete in question will be considered acceptable if the average compressive strength of a minimum of three test core specimens taken from a given area equal or exceed 85% of the specified 28-day strength and if the lowest core strength is greater than 75% of the specified 28-day strength.

J. In the event that concrete placed by the Contractor is suspected of not having proper air content, the Contractor shall engage a materials testing consultant approved by the Engineer, to obtain and test samples for air content in accordance with ASTM Specification C457. D

END OF SECTION

03360 GROUT

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The work included in this Section consists of grouting the various items listed hereinafter and indicated on the drawings.

1.0.2. RELATED WORK

A. Section 03300 "Cast-in-Place Concrete, Reinforcement and Formwork".

1.0.3. SUBMITTALS

A. Manufacturer's literature shall be submitted for review on the following items.

1. Nonshrink grout data shall include grout properties, mixing, surface preparation and installation instructions.

1.0.4. DELIVERY AND STORAGE

A. Grouting materials shall be delivered and stored in unbroken containers with seals and labels intact as packaged by the manufacturer.

1.0.5. QUALITY ASSURANCE

A. If the project includes patching, through bolt holes, epoxy anchors, and/or block outs, the manufacturer shall, if necessary, train the Contractor's employees in the mixing and curing of the epoxy grouts for each of these applications.

B. Furnish one year warranty. Manufacturer's warranty shall not contain a disclaimer limiting responsibility to the purchase price of products or materials.

PART 2 – PRODUCTS 3.0.1.

MATERIALS

A. Cementitious grout shall be composed of one part of Type II Portland cement to three parts of sand.

B. Non-shrink Nonmetallic Grout shall be Five Star Special Grout 150, Five Star Products, Inc.; Grout F-100, Sauereisen Cement; Masterflow 713, BASF Building Systems; NS Grout, Euclid Chemical Company, pre-mixed type, or approved equal.

C. Non-shrink Metallic Grout: Master Builders Embeco 636 Plus Grout, BASF Building Systems, pre-mixed type, or approved equal.

D. Non-shrink Hydraulic Cement Grout shall be Waterplug, Thoro Products, BASF Building Systems, or approved equal.

E. Non-shrink shall be Five Star HP Epoxy Grout, Five Star Products, Inc., available from Coastal Construction Products, Inc. or Wall-Nu Trowelable, Steelcote Manufacturing Co., available from Florida Wire and Rigging Works, or approved equal.

F. Specifications for cement and sand for mortar and grout shall be the same as those for concrete.

3.0.2. EPOXY ANCHOR GROUT

A. Epoxy anchor grout shall conform to ASTM C 881 - Epoxy-Resin-Base Bonding Systems for Concrete, Type IV, Class A, B and C, Grade 3 with the exception of gel time.

B. Heat deflection temperature per ASTM D 648 -- Test Method for Deflection Temperature of Plastics Under Flexural Load shall be a minimum 120 degrees.

C. Manufacturer shall certify that the epoxy anchor grout will maintain 90 percent of its strength up to a temperature of 125 degrees F.

D. Grout shall come in a 2 chambered cartridge with a metering system that provides the proper ratio of hardener and resin. The grout shall also come with a static mixer nozzle to thoroughly mix the hardener and resin together.

E. Epoxy anchor grout shall be capable of being used in submersed applications once cured.

F. Compressive strength per ASTM D 695 - Test Method for Compressive Properties of Rigid Plastics shall be 10,000 psi minimum.

G. If the average working or operating temperature will be over 100 degrees F or in a high fire risk area, use cement based non-shrink grout and oversized holes.

H. Overhead anchors and anchors in fire-resistive construction shall be cast-in anchors.

I. Embedment of adhesive anchors/rebar shall be deep enough to develop the anchor/rebar. Embedment shall not exceed 67 percent of the member depth.

J. Epoxy anchor grout shall be SET-XP by Simpson Strong-Tie Co., Inc.; Powers PE1000+ by Powers Fasteners, Inc.; RE 500 SD by Hilti, Inc.; or approved equal.

PART 3 – EXECUTION 3.0.1.

PREPARATION

A. All bonding surfaces shall be clean and dust and oil free. Grout shall be mixed and applied in accordance with manufacturer's recommendations.

B. Grout Mix proportions (for grout to fill cores in reinforced masonry walls): 1. One part Portland cement, Type I or II. 2. 2-1/4 parts damp, loose sand. 3. Parts shot gravel (3/8" maximum). 4. Mix to conform to ASTM C476-83 with a minimum compressive strength of 2500 psi at 28 days, have an 8" minimum and 10" maximum slump.

C. Grout shall not be placed until base concrete or masonry has attained its design strength, unless authorized otherwise by the Engineer. Surfaces that will be in contact with grout shall be free of dirt, loose rust, oil, wax, grease, curing compounds, laitance, loose concrete, and other deleterious materials.

D. Mechanical, electrical, and finish WORK shall be completed prior to placement of topping or concrete/grout fill. To ensure bonding to the base slab, the base slab shall be given an exposed aggregate finish. Alternatively where accepted by the Engineer, the base slab shall be given a roughened textured surface by a close-spaced rake while the surface is green. After curing, high pressure washing shall expose the aggregates and produce not less than a 3/16-inch amplitude roughness. Jackhammers or chipping hammers shall not be used.

3.0.2. INSTALLATION

A. Non shrink Grout:

1. Non shrink, nonmetallic grout shall be used for grouting precast concrete wall panel connections, column base plates, anchor bolts, reinforcing bars, pipe sleeves, and machinery supports.

2. Grout shall be mixed as close to the work area as possible and transported quickly to its final position in a manner which will not permit segregation of materials.

3. Non shrink grout shall be cured with water saturated burlap for at least three days or with an application of Super Rez Seal cure and seal compound applied immediately after grout placement.

4. Machinery set on grout pads shall not be operated until the grout has cured for at least 24 hours.

5. Expansive, non-shrink epoxy grout in the category of the DP Five Star Epoxy Grout shall be used for installation of vibrating machinery such as pumps.

B. Epoxy Adhesive Anchors: Grout shall be proportioned and mixed with automatic equipment. Unless otherwise indicated, embedment shall be sufficient to develop the ultimate tensile strength of the anchor or reinforcing bar per the manufacturer's ICCES report but shall not be less than 8 diameters for threaded rod or 12 diameters for reinforcing or smooth bars. Holes shall be dry.

C. Drilled anchors and reinforcing bars shall be installed in strict accordance with the manufacturer's instructions. Holes shall be roughened with a brush on a power drill, and cleaned. Drilled anchors shall not be installed until the concrete has reached the required 28 Day compressive strength. Anchors shall not be loaded until the grout has reached its indicated strength in accordance with the manufacturer's instructions.

END OF SECTION

03400 PRECAST PRESTRESSED CONCRETE

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The work under this section includes the design, casting, delivery, erection and shoring of precast prestressed concrete structures as shown on the Contract Drawings.

1.0.2. RELATED WORK

A. Section 03300 "Cast-in-Place Concrete, Reinforcement and Formwork".

B. Section 01340 "Shop Drawings".

1.0.3. REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. Without limiting the generality of other requirements of these specifications all work hereunder shall conform to the applicable requirements of the referenced portions of the following documents, to the extent that the requirements therein are not in conflict with the provisions of this Section:

1. South Florida Building Code, latest edition.

2. ACI 318, Building Code Requirements for Reinforced Concrete.

3. PCI MNL 116, Manual for Quality Control for Plants and Production of Precast Concrete Products.

4. ASTM A416, Specification for Uncoated Seven-Wire Stress-Relieved Steel Strand for Prestressed Concrete.

1.0.4. QUALITY ASSURANCE

A. Fabricator shall be a recognized prestressed concrete manufacturer with minimum five (5) years' experience in the manufacture and erection of similar units and whose design, fabrication and erection operations are supervised by a Florida Registered Professional Engineer.

1.0.5. CONTRACTOR SUBMITTALS

A. Shop Drawings: The Contractor shall submit shop and erection drawings for approval, showing concrete design strength; unit dimensions; unit weights; size, number, location and stress in prestressing strands; size, number and location of reinforcing bars including reinforcing for erection and handling stresses; concrete cover over reinforcing and strands; bearing and anchorage details; concrete finish; curing method; erection marks; hoist points and shoring points.

B. Design Calculations: The Contractor shall submit for approval, neat, legible and complete design calculations prior to fabrication. Calculations shall be by a Florida Registered Professional Engineer whose seal shall appear on calculation sheets and shop drawings.

1. Calculations shall include predicted in-place cambers without superimposed loads, with superimposed dead loads and with superimposed dead loads and live loads.

2. Span length in calculations shall be from center of bearing to center of bearing.

3. Include bearing and anchorage details including those in the precast sections and those in the job cast concrete structure.

C. Certificates: The Contractor shall submit manufacturer's test certificates on prestressing strands and reinforcing.

D. Concrete Cylinder Tests: The Contractor shall submit copies of cylinder break reports by an approved commercial test laboratory, made from each casting for this project to verify that concrete has attained minimum ultimate prestressed transfer strength specified.

1.0.6. DEFINITIONS

A. In these specifications, where the terms "Precast Concrete" and "Precast Concrete Specialties" are used, they shall have equivalent meaning.

PART 2 – PRODUCTS

2.0.1. MATERIALS

A. Concrete: Minimum 7 day ultimate compressive strength 4000 of psi. Higher strength will be permitted to suit manufacturer's design. In other respects, concrete shall comply with requirements of Section 03300 "Cast-in-Place Concrete, Reinforcing and Formwork".

B. Prestressing Strands: High strength 7 wire strand conforming with ASTM A416-94. Elongation test conforming with ASTM A270-90 with minimum elongation at rupture of 3.5% in 24 inches. Tests need not be made if certification of conformance with specifications is provided by manufacturer. Use strand of U.S. manufacture.

C. Reinforcing Steel: ASTM A615, grade 60.

D. Forms: Provide smooth units true to size, shape and detail with flat panes, sharp lines and arises, free from warp, twist, bow or similar distortions, spalling, broken edges, cracks or similar defects. Dimensional tolerances to be as provided in ACI 525 Standards Minimum Requirements for Thin Section Precast Concrete Construction.

2.0.2. FABRICATION

A. General: Fabricate units accordance with approved shop drawings and approved design calculations

B. Unit design and fabrication: Conform with ACI Standard Building Code Requirements for Reinforced Concrete and the Prestressed Concrete Institute Standards. Fabricator shall design joists and beams in accordance with loads indicated on drawings. Camber under dead load or deflection under total load shall not exceed 1/360 of span.

C. Inserts: Install hanger inserts and sleeves in unit forms for mechanical and electrical items as provided under other sections and as shown on drawings.

D. Curing: Top surface to receive water curing only.

E. Marking: Distinctively mark each unit with manufacturer's name and mark indicated on erection drawings.

F. Age: Units shall be minimum 10 days old before shipping or erection.

2.0.3. PREFORMED JOINT SEALANT

A. The joint sealing compound shall be Quik-Seal, a preformed, cold applied, ready to use plastic joint sealing compound as supplied by Quikset Utility Vaults, Santa Ana, California; Ram-Nick by K.T. Snyder Company; or approved equal.

2.0.4. MORTAR

A. Mortar used between the sections of precast concrete vaults shall be as recommended by the manufacturer.

2.0.5. NON-SHRINK GROUT

A. Non-shrink grout shall be as specified in the Section 03360 "Grout".

2.0.6. QUALITY CONTROL

A. Precast concrete units shall be made by an experienced manufacturer and shall be constructed as shown on the drawings and specified herein and shall be free of defects, checks and cracks. Care shall be taken in the mixing of materials, casting, curing and shipping to avoid any of the above.

B. The Contractor shall notify the City a minimum of 5 days before the units are cast and 5 days before shipment is made, in order to provide for plant inspection, if the City so directs.

PART 3 – EXECUTION

3.0.1. ERECTION

A. Erection to be by manufacturer and supervised by manufacturer's Florida Registered Professional Engineer or authorized representative. Handle and install units with precision, in conformance with drawings, details and erection drawings.

3.0.2. INSTALLATION

A. Required pads, plates and reinforcing bars shall be furnished for casting and anchorage in the adjoining work. The precast concrete units shall be installed in a workmanlike manner with the units tight and at right angles to the supporting beams or walls. The units shall be aligned and leveled in accordance with the procedures recommended by the manufacturer. Units shall be grouted by a mixture of not less than one part cement to three parts fine sand, care being taken to see that joints are filled. Damp grout that may have seeped through shall be removed before it hardens.

B. All openings in the precast units shall be made by the Contractor and are the responsibility of the Contractor. Where details for an opening are not shown on the drawings, the opening shall be made in accordance with the recommendation of the manufacturer. When an opening causes a loss in carrying capacity of the unit, the adjacent units shall be designed to carry the additional dead and superimposed load transferred from the unit with the opening. The Contractor shall provide saddle headers as required.

C. Extreme care shall be used to avoid damaging or soiling concrete as no repairing or cutting will be permitted. Damaged units shall be replaced at the expense of the Contractor. Wooden hammers shall be used, with pinch bars being used on unexposed parts only.

3.0.3. CLEANING AND REPAIRS

A. Cleaning: Clean exposed surfaces of units of stains to a uniform appearance. Do not use caustic or acid cleaners.

B. Repairs: Repair nicks or chips in exposed areas.

END OF SECTION

DIVISION 5 – METALS

05550 ALUMINUM RAILING

PART 1 - GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor shall design, furnish, fabricate, and install aluminum railing and appurtenances as indicated on the Drawings, complete, all in accordance with the requirements of this section.

1.0.2. QUALITY ASSURANCE

Standards: Unless otherwise specified, all materials, workmanship and practices shall conform to the following Standards:

A. South Florida Building Code, latest edition.

B. Aluminum Construction Manual, latest edition, by the Aluminum Association.

C. Applicable OSHA requirements

D. Rail and fittings shall be clear anodized, as specified below. Railing shall be plastic wrapped for protection. Wrap shall be removed only after erection.

1.0.3. SUBMITTALS

A. The Contractor shall submit to the Engineer of Record detailed shop drawings, prior to fabrication, for review and approval. The drawings shall be complete, covering all aluminum railing members, fastenings, connections, means of galvanic protection, etc., which for part of a finished structure.

B. Where written certification are called for below, it shall be submitted to the Engineer of Record.

PART 2 – PRODUCTS

2.0.7. ACCEPTABLE MANUFACTURING

G. Wesrail: Moultrie Manufacturing Co.

H. Thompson Railing Systems: Thompson Fabricating Co.

I. Approved equals.

2.0.8. ALUMINUM RAILING SYSTEM

A. General: Where indicated on the Drawings, pipe handrailing shall be provided. Pipe handrailing shall be supplied as required by the South Florida Building Code and OSHA whether indicated on the Drawings or not, including stair railings.

B. Prior to fabrication, verify all dimensions by actual measurement, so that the finished ladder will fit accurately and provide a neat appearance, with no part out of line and grade by more than 1/8 inch.

C. Handrailing system, including rails, stanchions and attachments, shall be designed and constructed to resist a load of not less than 200 pounds applied in any direction and at any point on the rails.

D. The handrailing shall be of welded construction design, with field splices where required between sections. All exposed welds shall be continuous fillets, watertight, and ground smooth. Bends, warps and ramps in the rails shall be made by bending the pipe to true and even curves, without kinks.

E. Vertical pipe supports to be set in concrete shall be set in built-in pipe sleeves, or concrete may be cored, minimum 5-inches in length. Removable posts shall be sleeved. The joint between upright and sleeve shall be cemented with epoxy grout.

F. Wall brackets for handrail shall be as manufactured by Mouitrie Manufacturing Company, J.G. Braun Company, Fulton Metal Products Company, or equal. Wall brackets shall be fabricated of metal compatible with handrail metal. End all wall mounted railings at the line of the first nosing.

G. Provide chain gates across all openings in railings. Chain shall be welded, stainless steel, close link hoisting chain, 1/4-inch by 1-5/16 inch links. One end of each chain gate shall be attached by a stainless steel shackle to a 1/4-inch round stainless steel stock eye bolted to the pipe stanchion and the other end connected to a heavy stainless steel snap hook. A 1/4-inch stainless steel eye shall be provided in the opposite stanchion or concrete wall, installed at the height of the center lines of the top rail.

H. Aluminum Railing: Stanchions and rails shall be nominal 2 inch diameter minimum, Schedule 80 aluminum alloy 6061-T6 with clear anodized finish. Railing posts must be adequately reinforced to meet the specified design loads. Handrailing shall be 42 inches in height. In no case shall the spacing of handrail posts exceed five (5) feet on center. Stainless steel railings may be used in lieu of aluminum railing at the CONTRACTOR's option.

I. Kickplates: Kickplates where not specifically called for in the Drawings shall be furnished and installed typically at the edges of all metal walkways and at other handrail installations. Kickplates shall be l/4-inch thick, must meet OSHA

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requirements, shall project 4-inches above walkway surface, may not infringe on minimum required walkway width and material must be the same as that of handrail construction. Kickplates shall be connected to handrail posts as detailed on the drawings.

2.0.9. FINISHES

A. Finish shall be natural anodized after forming, and before assembly. Each piece of aluminum to be anodized shall be finished (anodized) in accordance with the following Aluminum Association Designations:

1. Sheet: AA-M10C11c21A31, with minimum 0.4 mil coating

2. Structural shapes, plates, bars and pipe: AA-M10C11C21A41, with minimum 0.8 mil coating.

B. All fabricated aluminum items of the railing shall be anodized after fabrication. No touch-up paint will be accepted.

C. A written certification stating compliance with the aluminum finish (anodizing) as specified above shall be furnished for all aluminum material and/or items furnished and installed by the Contractor.

D. Protect all aluminum by a factory applied coating of water-tight clear methacrylate lacquer having a minimum thickness of 0.008"minimum capable of withstanding the action of lime and mortar for a period of at least one week in an atmosphere of 100% relative humidity at 100°F.; the action of 10% by weight muriatic acid for a period of six hours at 70°F.; and the action of the atmospheric weather for a period of 12 months. The coating shall be sprayed on, after anodizing and sealing procedures have been followed. Submit written certification indicating that the coating meets or exceeds the requirements of the Aluminum Association Mortar Test for Clear Lacquers on Anodized Aluminum.

2.0.10. EXPANSION BOLTS

A. Stainless steel type 316 wedge bolts furnished by handrail manufacturer.

PART 3 -- EXECUTION

3.0.1. EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

B. Beginning of installation means erector accepts existing conditions.

3.0.2. PREPARATION

A. Clean and strip primed items to bare metals where site welding is required.

B. Supply items required to be cast into concrete with setting templates, to appropriate sections.

3.0.3. FABRICATION

A. Fabricate railings in shop, made and erected square, plumb, straight and true, designed for adjustment to field variations, accurately fitted with tight joints and intersections.

3.0.4. INSTALLATION

A. Install items plumb and level, accurately fitted, free from distortion or defects.

B. Provide anchors and plates required for connecting railings to structure.

C. Aluminum Railings: Aluminum railing fabrication shall be performed by craftsmen experienced in the fabrication of architectural metal work. Exposed surfaces shall be free from defects or other surface blemishes. Dimensions and conditions shall be verified in the field. All joints, junctions, miters and butting sections shall be precision fitted with no gaps occurring between sections, and with all surfaces flush and aligned. Electrolysis protection of materials shall be provided.

D. After satisfactory installation, all coating shall be removed leaving the clean undamaged surface. In locations where aluminum may come in contact with dissimilar metals or masonry, the surfaces shall be given a heavy brush coat of alkaliresistant bituminous paint or separated with a non-absorptive tape or gasket.

3.0.5. EXPANSION BOLTS

A. Expansion bolts shall be spaced 10d apart and 5d edge distance for no reduction in pull out strength. A safety factor of four shall be provided on expansion bolt pull out values published by the manufacturer.

3.0.6. ALUMINUM SURFACES

A. Aluminum surfaces in contact with concrete, grout (except epoxy grout), dissimilar metals (except stainless steel), or buried in the ground shall be protected with a heavy coat of Bitumastic No. 300, as manufactured by Kop-Coat, Inc., or approved equal.

END OF TECHNICAL SPECIFICATIONS

EVALUATION PROCESS

SELECTION COMMITTEE

A Selection Committee, consisting of City personnel, will convene, review and discuss all proposals submitted.

The Selection Committee will use a point formula during the review process to score proposals and assign points in the evaluation process in accordance with the evaluation criteria. The Proposer shall satisfy and explicitly respond to all the requirements of the RFP, including a detailed explanation of how the services shall be performed.

Each proposal will be reviewed to determine if the Proposal is responsive to the submission requirements outlined in the Solicitation. A responsive Proposal is one which follows the requirements of this Solicitation that includes all documents submitted in the format outlined in this Solicitation, is of timely submission, and has the appropriate signatures as required on each document. Failure to comply with these requirements may result in the Proposal being deemed non- responsive. The Contract (s) will be awarded to the most responsive Proposer whose Proposal best serves the interest of and represents the best value to the City of Opa-locka.

EVALUATION CRITERIA

The Committee may select and choose to invite any and/or or all firms to make presentations and be interviewed by the Committee as part of the evaluation process for this Solicitation. The Committee's decision will be communicated by staff to all Proposers. The Proposer's presentation may clarify but may not modify their submitted Proposal. Any discussion between the presenter (s) and Evaluation Committee during presentations are intended only for purposes of providing clarification in response to questions from the Committee.

Category	Points
1. Experience and Qualifications. The technical expertise and professional competence in areas directly related to this RFP; required number of years of experience in performing similar work 2. demonstrated. The ability to manage and coordinate the services, deliver quality products/services, be a reliable service provider, stay within budget, and meet deadlines; level of experience and training of key personnel assigned, including sub-consultants, if applicable; strength and stability of the firm; breadth and depth of resources.	40
1. References Provide a minimum of three (3) references of recent demonstrated experience in providing consulting services similar in nature and size to the Scope of Work and include any government references. Provide a short description of the work performed, dates of service, names, addresses, telephone numbers, fax numbers, locations, remedies, and contract amount.	20
1. Resources and approach The methodology and systems reflecting the ability to provide the requested services; thorough discussion of objectives; sensitive approach to public and regulatory concerns; management, coordination of services and quality controls; attention to detail and creativity.	30
Price Proposal 1. Cost of proposed services	10
TOTAL	100

ORAL PRESENTATIONS

Proposers may be required to make individual presentations to the City Selection Committee to clarify their proposals. Only those firms with the highest rated scores in accordance with the stated criteria and their weights will be invited to give oral presentations. However, the City has the right to accept the best proposal as submitted, without discussion or negotiation.

If the City determines that such presentations are needed, a time and place will be scheduled for oral presentations. Each Proposer shall be prepared to discuss and substantiate any of the areas of the proposal submitted, and its qualifications to perform the specified services. During the oral presentations, the Proposers should relate their discussion to the evaluation criteria, which will include (but not be limited to) their approach to the project. The proposed Project Manager must be in attendance.

The Evaluation Criteria may be changed for the oral presentation evaluation phase. References and site visits (if completed) shall be included in the final evaluation criteria, along with other criteria and weights as determined by the Selection Committee. Finalists will be informed as to the revised criteria, if any, prior to their oral presentation.

Additionally, prior to award of an Agreement pursuant to this RFP, the City may require Proposers to submit such additional information bearing upon the Proposer's ability to perform the services in the Agreement as the City deems appropriate.

FINAL SELECTION

The City of Opa-locka will select the firm that meets the best interests of the City. The City shall be the sole judge of its own best interests, the proposals, and the resulting negotiated Agreement. The City's decisions will be final. Following the selection of firm, the expectation is that an Agreement will be executed between both parties. City staff will recommend award to the responsible Proposer whose Proposal is determined to provide overall best value to the City, considering the evaluation factors in this RFP.

AWARD AND CONTRACT EXECUTION

After review by the Selection Committee of the proposals and oral presentations a recommendation will be made to the City Manager for submission to the City Commission for final approval. Upon Commission authorization, contract negotiations will be initiated with the first ranked firm. If those negotiations are unsuccessful, the City will formally terminate negotiations with the first ranked firm and will commence contract negotiations with the next ranked firm, etc. Upon successful contract negotiations with the prevailing firm, the remaining firms will be notified that the process has been completed and that they were not selected.

THE CITY OF OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

TO THE COMMISSION OF THE CITY OF OPA- LOCKA,
FLORIDA

Ladies and Gentlemen:

The undersigned bidder proposes to furnish all labor, tools, material and supplies, and to sustain all the expense incurred in doing the work set forth below that may be awarded the undersigned by the City of Opa-Locka, Florida, through its proper officers, and to do the same strictly in accordance with the plans and contract documents on file in the Office of the City Engineer of Opa-Locka, which are referred to below and made a part hereof, at the following combination of lump sum prices:

Item No.	Estimated Quantity	Description	Total
1.	Lump Sum (Divided into 2 or 4 payments See Measurement and Payment for Conditions)	For performing preparatory work and operations in mobilizing for beginning the work of the Project, but excluding materials and permit costs, both of which are paid under other payments items, the lump sum of _____ Dollars and _____ Cents	$_____
2.	130 LF	For selling and delivering to the City 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert installation, the price per linear foot of _____ Dollars and Cents	$_____

3.	130 LF	For installing 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert, price per linear foot of _____ Dollars and Cents	$_____
Item No.	Estimated Quantity	Description	Total
4.	75 LF	For selling and delivering to the City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of _____ Dollars and Cents	$_____
5.	75 LF	For installing City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of _____ Dollars and Cents	$_____
6.	Lump Sum	For demolition and removal of existing three (3) 66-inch concrete pipe culvert with headwalls and retaining walls, the lump sump of _____ Dollars and Cents	$_____

7.	670 CY	For the excavating of existing backfill material at existing Culvert location, the price per cubic yard of _____ Dollars and Cents	$_____

8.	Lump Sum	For providing adequate bypass pumping to maintain uninterrupted Canal flow during construction, the price per lump sump of _____ Dollars and Cents	$_____
Item No.	Estimated Quantity	Description	Total
9.	100 LF	For furnishing and installing all necessary Turbidity Barriers for erosion control measures specified on plans, the price per linear foot of _____ Dollars and Cents	$_____
10.	2 Each	For furnishing and installing all necessary Drop Inlet Sediment Protection for erosion control measures specified on plans, the per unit of _____ Dollars and Cents.	$_____

11.	45 CY	For selling and delivering to the City Concrete for the installation of 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, the price per cubic yard of _____ Dollars and Cents.	$_____
12.	45 CY	For constructing 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, as indicated in the Plans, the price per cubic yard of _____ Dollars and Cents.	$_____

13.	405 SF	For furnishing and constructing 4-inch thick sidewalk and ramp curbing to match existing per FDOT index No. 310, the price per square foot of _____ Dollars and Cents.	$_____
Item No.	Estimated Quantity	Description	Total
14.	150 SF	For constructing new concrete curb and gutter per FDOT index No. 300, the price per square foot of _____ Dollars and Cents.	$_____

15.	200 CY (Contingent Item)	For furnishing and placing suitable Backfill (A-24 or better) required for Culvert placement, the price per cubic yard of _____ Dollars and Cents.	$_____
16.	280 TON	For furnishing and installing Rubble (Broken Stone), including filter fabric, at Culvert embankment for the rip-rap installation as per FDOT Standard Specification No. 530, the price per ton of _____ Dollars and Cents.	$_____

17.	25 CY	For furnishing and installing sand-cement rip rap bags at culvert pipe ends per Miami-Dade County DTPW BC 3.4 & BC 3.5 for straight end pipes, the price per cubic yard of _____ Dollars and Cents.	$_____
Item No.	Estimated Quantity	Description	Total
18.	45 CY	For furnishing and constructing concrete endwall for three (3) 66" barrel culvert installation as per FDOT index 430-032, the price per cubic yard of _____ Dollars and Cents.	$_____

19.	65 LF	For furnishing and installing concrete shoulder barrier as per FDOT index No. 521-001, the price per linear foot of _____ Dollars and Cents.	$_____
20.	1025 SY	For milling (nominal 1 inch thick), surface course for permanent paving repairs, the price per square yard of _____ Dollars and Cents.	$_____
21.	1025 SY	For constructing for Type "V" permanent paving repairs as per details provided in plans, the price per square yard of _____ Dollars and Cents.	$_____

22.	8 each	For replacing pavement markings damaged, removed, or obliterated by the contractor's operation, the price per unit of _____ Dollars and Cents.	$_____
Item No.	Estimated Quantity	Description	Total

23.	40 SY (Contingent Item)	For restoring sodded area, the price per square yard of _____ Dollars and Cents.	$_____
24.	Lump Sum	For providing full Traffic Control during construction, Maintenance of Traffic, the lump sum price of _____ Dollars and Cents.	$_____
25.	2100 SF (Contingent Item)	For sheeting and shoring ordered left in place by the Engineer, the price per square foot of _____ Dollars and Cents.	$_____
26.	670 CY (Contingent Item)	For removal, transport and legal disposal of unsuitable backfill materials, including tipping fees, the price per cubic yard of _____ Dollars and Cents.	$_____

27.	**Sub-Total – Bid Items 1 through 26**	$_____	

Item No.	Estimated Quantity	Description	Total
28.	Dedicated Allowance	For providing uniformed, off-duty policemen for the purpose of maintenance of traffic, the aggregate sum of _____ Dollars and Cents.	$_____
29.		For all cost of required permit fees, impact fees, if required by the Engineer, the sum of 3% of the Subtotal, Item 27 (0.03) x (Subtotal, Item 27) _____ Dollars and Cents.	$_____
30.		For unforeseen conditions, for minor construction changes and for quantity adjustments, if ordered by the Engineer, the sum of 10% of the Subtotal, Item 27 (.10) x (Subtotal, Item 27) _____ Dollars and Cents.	$_____

31.	**TOTAL BID – (Sum of Bid Item Nos. 27, 28, 29 and 30)**	$_____	

Note: For a detailed description of each Quotation Item, refer to Section 01025 of the Specifications entitled "Measurement and Payment.

THE CITY OF OPA-LOCKA OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

The City of Opa-Locka reserves the right to waive any informality in any bid and to reject any or all bids.

TOTAL BASE BID PRICE FOR PROPOSAL (ITEMS 1 THROUGH 32): $_____
(FIGURES)

_____Dollars and

_____Cents

AMOUNTS SHALL BE SHOWN ON BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT SHOWN IN WORDS SHALL GOVERN FOR EACH BID ITEM AND TOTAL BASE BID.

Bidder acknowledges that included in the various items of the bid proposal and in the TOTAL BASE BID PRICE are costs for complying with the Florida Trench Safety Act, F.S. 553.60 et. seq. The Bidder by signing and submitting the Trench Safety Act Compliance Statement is, in writing, assuring that it will perform any trench excavation in accordance with applicable trench safety standards.

Contract award shall be based upon the total base bid price, as identified above, by the lowest responsive, responsible bidder.

_____	_____ FIRM
NAME (PRINT)	BIDDER'S SIGNATURE

PROJECT PLANS COMPLETION PERCENTATGE:

300 Engineering Group, LLC

CONTRACT NO. 20-0324200 - TASK 3

CULVERT REPLACEMENT ALONG SESAME STREET
BETWEEN NW 135TH STREET AND ATLANTIC AVENUE

Engineer's Opinion of Probable Cost

A - CONSRUCTION ITEMS

ITEM NO.	DESCRIPTION	UNIT	COST/UNIT	QUANTITY	TOTAL COST	COMMENTS
	Civil					
1	FURNISH AND INSTALL INLET PROTECTION SYSTEM	EA	$300.00	2	$600.00	
2	FURNISH AND INSTALL FLOATING TURBIDITY BARRIER	LF	$35.00	100	$3,500.00	
3	FOR SELECTIVE DEMOLITION	SF	$60.00	2000	$120,000.00	
4	FOR EXCAVATING EXISTING BACKFILL MATERIAL	CY	$95.00	670	$63,650.00	
5	FURNISH AND INSTALL CANAL BYPASS PUMPING	Day	$3,250.00	45.000	$146,250.00	
6	FOR REWORK LIMEROCK BASE, 4"	SY	$25.00	35	$875.00	
7	FOR MILLING EX. ASPHALT PAVEMENT, 1" AVG DEPTH	SY	$5.00	1025	$5,125.00	
8	FOR FURNISHING AND PLACING SUITABLE BACKFILL MATERIAL	CY	$70.00	200	$14,000.00	
9	FURNISH AND INSTALL SUPERPAVE ASPHALTIC CONCRETE, SP-9.5, PG	TN	$460.00	60	$27,600.00	
10	FURNISH AND INSTALL CONCRETE SIDEWALK, 4" THICK	SY	$100.00	55	$5,500.00	
11	FURNISH AND INSTALL CONCRETE PAVEMENT, 10" THICK	SY	$375.00	170	$63,750.00	
12	FURNISH AND INSTALL PIPE CULVERT ROUND, 66" DIAMETER	LF	$1,050.00	130	$136,500.00	
13	FURNISH AND INSTALL STRAIGHT CONCRETE ENDWALL	CY	$1,950.00	45	$87,750.00	
14	FURNISH AND INSTALL CONCRETE CURB & GUTTER, TYPE F	LF	$35.00	345	$12,075.00	
15	FURNISH AND INSTALL DETECTABLE WARNINGS	SF	$60.00	25	$1,500.00	
16	FURNISH AND INSTALL RIPRAP-SAND-CEMENT BAGS	CY	$600.00	25	$15,000.00	
17	FURNISH AND INSTALL RIPRAP-RUBBLE STONE	TN	$175.00	280	$49,000.00	
18	FURNISH AND INSTALL CONCRETE SHOULDER BARRIER	LF	$620.00	65	$40,300.00	
19	FURNISH AND INSTALL GUARDRAIL-ROADWAY	LF	$70.00	75	$5,250.00	
20	FURNISH AND INSTALL THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF	$10.00	72	$720.00	
21	FURNISH AND INSTALL THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6"	GM	$9,100.00	0.013	$118.30	

22	FURNISH AND INSTALL THERMOPLASTIC, STANDARD, WHITE , SOLID, 6"	GM	$9,350.00	0.038	$355.30	
23	FURNISH AND INSTALL RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	EA	$80.00	8	$640.00	
24	FURNISH AND INSTALL PERFORMANCE TURF	SY	$20.00	40	$800.00	
			SUBTOTAL A - CONSTRUCTION COSTS:		$800,858.60	
B - OTHER DIRECT COSTS						
	MOT AND TRAFFIC CONTROL (PERCENTAGE OF A) :		5.8%		$46,449.80	
	MOBILIZATION AND DEMOBILIZATION (PERCENTAGE OF A) :		10.0%		$80,085.86	
	OFF-DUTY POLICE OFFICER		-		-	
	SUBTOTAL B - OTHER DIRECT COSTS: $126,535.66 CONSTRUCTION SUBTOTAL (A + B): $927,394.26					
C - CONTINGENCY						
FOR UNFORSEEN CONDITIONS, MINOR CONSTRUCTION CHANGES, AND QUANTITY ADJUSTMENTS AS ORDERED BY THE ENGINEER (PERCENTAGE OF CONSTRUCTION SUBTOTAL):			10.0%		$80,085.86	
DEDICATED ALLOWANCE: JET EXISTING STORM PIPES SOUTH OF CULVERT		LF	$20.00	200	$4,000.00	
DEDICATED ALLOWANCE: DESILT TWO (2) DRAINAGE STRUCTURES		EA	$500.00	2	$1,000.00	
DEDICATED ALLOWANCE: SHEETING & SHORING		SF	$20.00	2100	$42,000.00	
DEDICATED ALLOWANCE: REMOVAL & TRANSPORT OF UNSUITABLE BACKFILL		CY	$60.00	670	$40,200.00	
DEDICATED ALLOWANCE: PERMITS, BONDS, INSURANCE, MAINTENANCE BOND			5.0%		$40,042.93	
OFF DUTY POLICE OFFICER ALLOWANCE (BASED ON PART-TIME FOR 60 CONSTRUCTION DAYS)			-		$26,400.00	
			TOTAL VALUE OF ENGINEER'S OPINION OF PROBABLE COST (A + B + C):			$1,161,123.05
			100%			

RFP NO. 23-1016200

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: _____

   Address: _____

   City, State, Zip: _____ Phone/Fax: _____

2. Check One: Corporation ( ) Partnership ( ) Individual ( )

3. If Corporation, indicate:
   Date of Incorporation: _____ State in which Incorporated: _____

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization: _____

5. **Name and Title of Principal Officers** **Date Elected:**

   _____ _____

   _____ _____

   _____ _____

   _____ _____

6. The length of time in business:_years

7. The length of time (continuous) in business as a service organization in Florida: ___years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka RFP during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the Proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to insure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non- responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature_____

Printed Name _____

CITY OF OPA-LOCKA RFP NO. 23-1016200

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by_____the
(Name)
_____ of_____
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

Date _____ Signature _____

CITY OF OPA-LOCKA NON-COLLUSION AFFIDAVIT
STATE OF FLORIDA - COUNTY OF MIAMI DADE

_____ being first duly sworn, deposes and says that:

(1) He/She/They is/are the ____ (Owner, Partner, Officer, Representative or Agent) of _____ the PROPOSER that has submitted the attached proposal.

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal.

(3) Such Proposal is genuine and is not a collusive or sham Proposal.

(4) Neither the said PROPOSER nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPOSER, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPOSER, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPOSER, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPOSER, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPOSER or any other of its agents, representatives, owners, employees, or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

_____
Witness

By: _____
Signature

_____
Print Name and Title

_____
Witness

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not

engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By:_____

Title: _____

Sworn and subscribed before this

____day of_____, 20___

_____
Notary Public, State of Florida

_____
(Printed Name)

My commission expires: _____

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-Verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-consultants/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to

the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-Verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opalocka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the EVerify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name:

_____

Authorized Signature:

_____

Print Name:

Title:

Date:

RFP NO: 23-1016200

CITY OF OPA-LOCKA – REQUEST FOR PROPOSAL (RFP)
SESAME STREET CULVERT
REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE

780 FISHERMAN STREET
OPA-LOCKA, FL 33054

Miami-Dade County, Florida

Prepare For:

CITY OF OPA-LOCKA

Prepared By:

SAFA CONSTRUCTION, LLC

SAFA CONSTRUCTION, LLC

October 2023

Table of Contained:

A. Cover Letter

B. Administrative Information

B1. Insurance information
B2. Bonding Capacity
B3. Debarment, Suspension Certification
B4. Drug-Free Certification
B5. Non-Collusion Affidavit
B6. Non-Discrimination Affidavit
B7. E-Verify Form
B8. Certification Regarding Debarment
B9. Licenses

C. Evaluation Criteria

C1. Experience and Qualifications
- i. List of major subcontractors
- ii. Organizational structure of the project
- iii. Quality Control Process
- iv. Brief resume of key persons
- v. Applicable certifications

C2. References
C3. Resources and approaches
C4. Schedule
C5. Price Proposal

A. Cover Letter

SAFA CONSTRUCTION, LLC

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

October 14, 2023

City of Opa-Locka

Procurement Office

780 Fisherman Street

Opa-locka, FL 33054

Subject: Bid Proposal Submittal for Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave (RFP NO: 23-1016200)

Dear City of Opa-Locka,

I am writing to submit my bid proposal for the Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave as advertised by your esteemed organization. As a highly skilled and experienced Safa Construction, I am confident that my proposal will not only meet but exceed your expectations.

I have carefully reviewed the project requirements outlined in the Request for Proposal (RFP) document and believe that my expertise aligns perfectly with the needs of the project. I have a proven track record of delivering exceptional results in similar projects, and I am eager to bring my skills and knowledge to contribute to the success of your project.

I take great pride in my professionalism, attention to detail, and commitment to delivering projects on time and within budget. Throughout my career, I have built strong relationships with clients by actively listening to their needs, communicating effectively, and providing tailored solutions. I am confident that my dedication to customer satisfaction and my ability to adapt to changing project requirements will make me an ideal partner for this endeavor.

Furthermore, I understand the importance of collaboration and teamwork in achieving project success. I am ready to work closely with your team, actively participating in meetings, sharing progress reports, and addressing any concerns promptly. By fostering open communication and maintaining a strong work ethic, I am confident that we can achieve outstanding results together.

SAFA CONSTRUCTION, LLC

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

Thank you for considering my bid proposal for the Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave, I am excited about the possibility of collaborating with your organization and contributing to the success of this project. I am available for further discussion or clarification at your convenience.

I look forward to the opportunity of meeting with the City of Opa-Locka and discussing how we can best move forward. Once again, thank you for your time and consideration.

Sincerely,



Digitally signed by MD S RAHMAN
DN: c=US, o=SSN ENGINEERING LLC, dnQualifier=A01410D000001882EED5D770005BFE, cn=MD S RAHMAN
Date: 2023.10.16 12:11:21 -04'00'

MD Shahinur Rahman, CGC, PMP, MS, PE (CA, FL)

PRESIDENT /CEO

SAFA CONSTRUCTION, LLC

SBE | CBE

B1. Insurance information

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 10/13/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: STACEY FRIEDMAN	
Insurance by Rob 4801 Johnson Road #13-14 Coconut Creek FL 33073	PHONE (A/C, No, Ext): (954) 331-4468 FAX (A/C, No): E-MAIL ADDRESS: service@InsuranceByRob.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: EVANSTON INS CO	35378
	INSURER B: INFINITY ASSUR INS CO	39497
	INSURER C: BERKSHIRE HATHAWAY DIRECT INSURANCE C(	10391
	INSURER D:	
	INSURER E:	
	INSURER F:	

INSURED
SAFA CONSTRUCTION, LLC 11186 SW 17th Mnr Davie FL 33324

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:			SES1814296 00	05/06/2023	05/06/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY			82 509-82007-9259-001	10/20/2022	10/20/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
	UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $						EACH OCCURRENCE AGGREGATE 	$ $ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		N9WC952274	04/02/2023	04/02/2024	PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CITY OF OPA-LOCKA
780 FISHERMAN ST
OPA LOCKA FL 33054

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Stacey Friedman

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B2. Bonding Capacity

Alscott, Inc.

An AssuredPartners Company
4911 S. Arrowhead Dr. Suite 310
Independence, MO 64055
Phone: 816-525-3155

October 26, 2022

Re: Safa Construction
Davie, FL
Bonding Program

Dear Sir or Madam:

Please let this letter serve as notice that Safa Construction is bonded by the Foundation Surety & Insurance Solutions, which is listed as a U.S. Treasury Department approved surety.

Based upon our solid relationship, and Safa Construction's top rated performance, we are pleased to state that Safa Construction does have bonding capacity currently available with Foundation Surety & Insurance Solutions for a single bond of $1.5 million with an aggregate of up to $3.5 million. It is understood the issuance of any final or bid bonds is a matter between the Safa Construction and Foundation Surety & Insurance Solutions and no liability to third parties is assumed should bonds not be executed for any reason.

We fully recommend Safa Construction for your construction needs. You will find the company has a proven track record of owner satisfaction and of bringing projects in on time and within budget.

If you have any questions, please feel free to call.

Sincerely,

David S. Salavitch

David S. Salavitch
President

B3.Debarment, Suspension Certification

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature 

Printed Name MD SHAHINUR RAHMAN, CEO

B4. Drug-Free Certification

CITY OF OPA-LOCKA

RFP NO. 23-1016200

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by MD SHAHINUR RAHMAN the
(Name)

CEO of SAFA CONSTRUCTION, LLC
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

2/28/2023
Date

Signature

B5. Non-Collusion Affidavit

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

I, MD SHAHINUR RAHMAN **being first duly sworn, deposes and says that:**

(1) He/She/They is/are the OWNER OF SAFA CONSTRUCTION, LLC (Owner, Partner, Officer, Representative or Agent) of _____ the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

_____
Witness

_____
Witness

By: _____
Signature

MD SHAHINUR RAHMAN, CEO
Print Name and Title

B6. Non-Discrimination Affidavit

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: MD SHAHINUR RAHMAN

Title: CEO

Sworn and subscribed before this

14th day of November, 2022

Ayesha Hack

Notary Public, State of Florida

AYESHA HACK

(Printed Name)

AYESHA HACK
Notary Public - State of Florida
Commission # HH 222913
My Comm. Expires Apr 17, 2026
Bonded through National Notary Assn.

My commission expires: 04-17-2026

B7. E-Verify Form

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: SAFA CONSTRUCTION, LLC

Authorized Signature: 

Print Name: MD SHAHINUR RAHMAN

Title: CEO

Date: 02/28/2023

B8. Certification Regarding Debarment

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly

rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature 

Printed Name MD SHAHINUR RAHMAN

B9. Licenses

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD

THE GENERAL CONTRACTOR HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

RAHMAN, MD SHAHINUR

SAFA CONSTRUCTION, LLC
11186 SW 17TH MNR
DAVIE FL 33324

LICENSE NUMBER: CGC1531601

EXPIRATION DATE: AUGUST 31, 2024

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor

Melanie S. Griffin,Secretary

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

RAHMAN, MD SHAHINUR

11186 SW 17T MNR
DAVIE FL 33324

LICENSE NUMBER: PE80669

EXPIRATION DATE: FEBRUARY 28, 2025

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor

Melanie S. Griffin,Secretary

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

SHUVO, DILNAHAR HOSSAIN

11186 SW 17TH MNR
DAVIE FL 33324

LICENSE NUMBER: PE92997

EXPIRATION DATE: FEBRUARY 28, 2025

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

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C. Evaluation Criteria

C1. Experience and Qualifications
- i. List of major subcontractors
- ii. Organizational structure of the project
- iii. Quality Control Process
- iv. Brief resume of key persons
- v. Applicable certifications

C2. References
C3. Resources and approaches
C4. Schedule
C5. Price Proposal

i. List of major subcontractors

No	Name	State Document Number (Sunbiz)	The main responsibility in the project	Number of Years in Business
1	TORQUE LAND GRADING LLC	L21000126128	Demolition & riprap	2
2	I & C EARTHMOVERS, CORP.	P98000076719	Removing the material from site	25
3	AC TRENCH, CORP.	P08000034480	Demasking, backfill Installation the culvert	15
4	ARROW ASPHALT & ENGINEERING, INC	P97000003580	All Roadway work	26
5	SAFA CONSTRUCTION LLC	L21000422182	Project Management & Concrete Pavement	2

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: SAFA CONSTRUCTION, LLC

   Address: 11186 SW 17TH MNR

   City, State, Zip: DAVIE, FL 33324 Phone/Fax: (954) 326-8295

2. Check One: Corporation (✓) Partnership ( ) Individual ( )

3. If Corporation, state:
   Date of Incorporation: 09/20/2021 State in which Incorporated: FL

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization: N/A

5. **Name and Title of Principal Officers** **Date Elected:**

MD S RAHMAN, CGC,PE, PMP (CEO)	09/20/2021
DILNAHAR H SHUVO, PE (AR)	09/20/2021

6. The length of time in business: 2 (two) + years **Please Note that I (MD Shahinur Rahman) has 20+ years experience in construction and 20+ years Engineering experience)**

7. The length of time (continuous) in business as a service organization in Florida: 2 (two) + years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

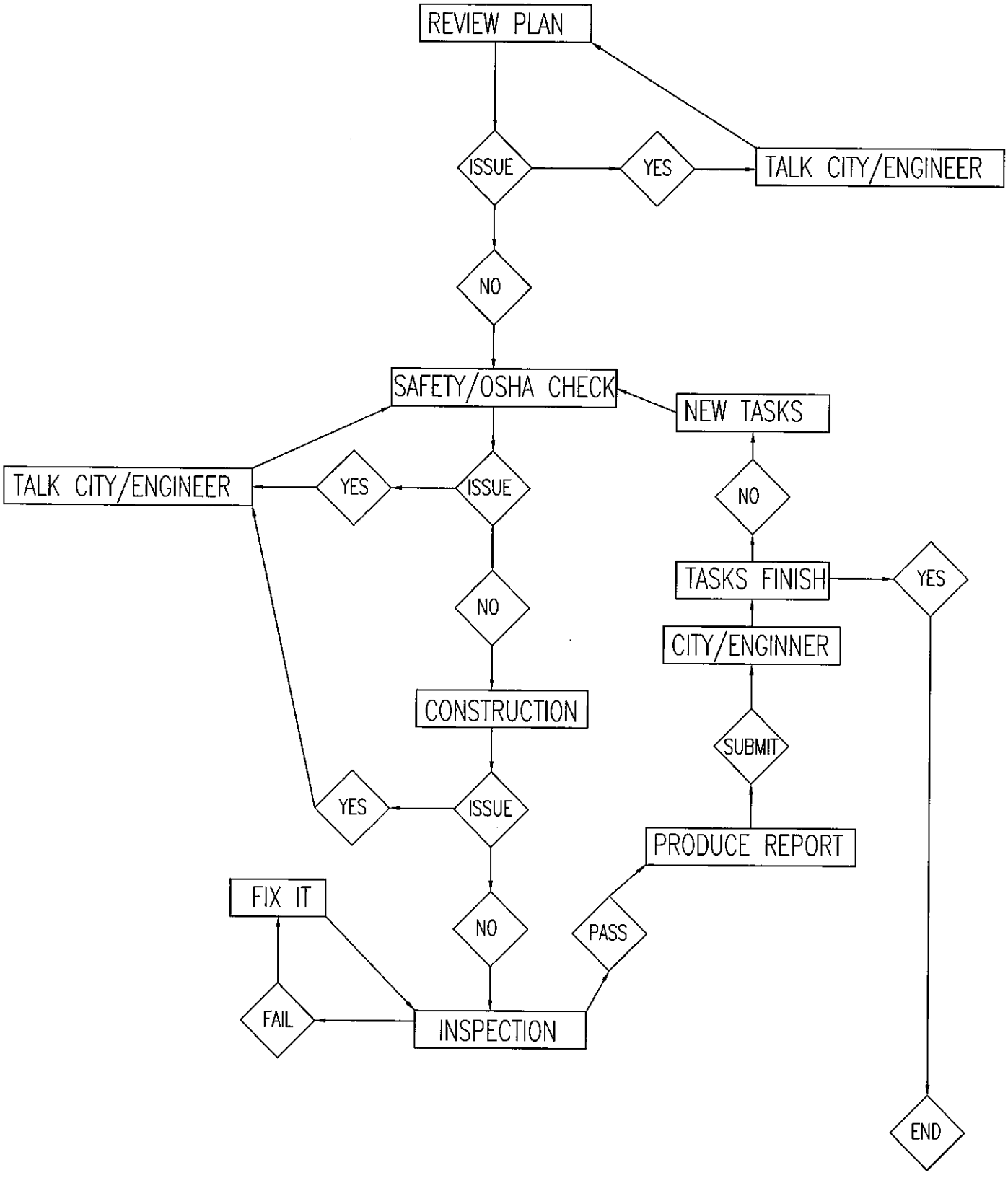
With this short period of time SAFA Construction has done Eight (8) public projects and out of 8, 3 project with city of OPA-LOCKA.

ii. Organizational structure of the project

iii. Quality Control Process

GENERAL OUTLINE FOR QUALITY CONTROL PLAN

SESAME STREET CULVERT REPLACEMENT
(RFP NO: 23-1016200)



iv. Brief resume of key persons

MD Shahinur Rahman, CGC, PMP, MS, PE (CA, FL),

President

SAFA CONSTRUCTION, LLC

EDUCATION

- Master of Science in Computer Science, Texas A&M University, TX, 2003
- Bachelor of Science in Civil Engineering, Bangladesh University of Engineering and Technology (BUET), 1998

PROFESSIONAL CERTIFICATIONS

- Certified General Contractor CGC License No. 1531601
- Professional Engineer FL PE License No. 80669
- Professional Engineer CA PE License No. 75093
- Project Management Professional, Cert No 1474518

PROFESSIONAL TRAINING

- 30 Hours OSHA
- Advanced MOT Certification

KEY EXPERIENCE

- Construction Administration
- CPM Scheduling
- Asset Management
- Contract Negotiation
- Strategic Planning
- Estimating and Bids
- Value Engineering
- Quality Assurance
- Business Development
- Clients Relationship
- Procurement
- Leadership

WORK HISTORY

- SAFA Construction LLC.
- SSN Engineering
- Marlin Engineering
- Kimley-Horn and Associates

SUMMARY OF EXPERIENCE

Over Twenty (20) years of professional experience in Civil Engineering and leading all functions of Heavy Civil Construction and Project Management including Contract Administration, Accounting, Planning, Design, Processing, Specs Review, Field Supervision and Operations, Managing Staff, Mentoring young Professionals, Supervising sub-contractors, Budgeting, Scheduling, Progress Reporting and Timely Completion of Projects. Mr. MD's areas of expertise are:

- Manage contracts and completion of several municipal, commercial and private construction projects from a variety range of scopes and in excess of $15 Billion.
- Monitoring the progress of contracts administration including design-build projects.
- Receive and analyze bids after award for turnover to management team.
- Execution of construction including supervision of subcontractors, and awarding sub's subcontracts and major purchase orders with vendors and suppliers.
- Work with Senior VP, operations manager, field and office core personnel to establish planning for job Execution and Logistics.
- Evaluate and maintain cost control and forecasting from beginning and thru the duration of project.
- Coordinates requirements of governing authorities for permits, inspections and final approval of the project with A/E.
- Maintain submittal control, including scheduling, receiving, reviewing, approving and expediting submittals from suppliers and subcontractors to comply with progress of CPM schedule.
- Manages client relations and participate with the development of new business for the company.
- Control invoicing from subcontractors and vendors, including review and approval of schedules of values, pay requisitions and verify compliance of subs with proper insurance coverage.
- Review and monitors QC/QA and safety.
- Supervise and assists in the development of office personnel through mentoring and on-the-job training.
- Effectively manages project close-out tasks and warranty work.

PROJECT EXPERIENCES

- Midtown Miam, Miami Dade County FL - Installation of 26,400 LF of 36" C-900 PVC Pipe, 21,400 LF of 42" HDPE pipe including a new meter station and site work restoration for asphalt, concrete sidewalks, curbing, driveways, installation of new drainage structures, piping valves and appurtenances - $25M

- Marriott at Miami Airport , Miami, FL - Installation of 38,500 LF of 28" HDPE and 9,100 LF of 14" HDPE piping system including 200 LF of 30" DIP pipe and overhead metal bridge, nine (9) Recovery Well Systems connected to 28" header pipe with approx. depth from 70-95 feet. FL - $17.0 M

Dilnahar H. Shuvo, MS, PE
Vice-President

SAFA CONSTRUCTION, LLC

Ms. Shuvo, with eight years of experience, has prepared calculations and plans for the design of highways and streets, including roadway alignments and profiles, signing and striping, lighting, paving, and grading, preforming quantity calculations, design calculations, and project cost estimating, researched standards and specifications and has worked with City, County, State, and Federal manuals utilizing applied software to perform engineering analysis and prepare reports. She also has lighting, sign design and drainage design experience using AGI32, Guide Sign, AutoTurn Analysis and ICPR. Ms. Shuvo has working experience with OpenRoads Designer, MicroStation, AutoCAD, Microsoft Office, HCM 2000, and CORSIM (Version 6.0).

EDUCATION

Master of Science in Civil Engineering, Florida International University (FIU), Florida, 2008

Bachelor of Science in Civil Engineering, Bangladesh University of Engineering & Technology, (BUET), Bangladesh, 2004

REGISTRATION

Professional Engineer #92997, FL

CERTIFICATIONS/TRAINING

Certified, Advanced Work Zone Traffic Control, 2021

Training, FDOT, Specifications Package Preparation, 2016

PROJECT EXPERIENCE

I-95 and Spanish River Boulevard Interchange, Palm Beach County – FDOT District 4
Engineer Intern responsible for assisting in the design for the drainage modifications of Segments 4 and 5. This task was part of the on-going design build project at the I-95 Spanish River Blvd Interchange in Boca Raton, FL. This project included the construction a new two-level interchange, modification of the existing Yamato Road and I-95 interchange, addition of auxiliary lanes from Glades Road to Congress Avenue on I-95 and cross street improvements of Spanish River Blvd. and Yamato Road. This two-level interchange includes coordination with FAA, Boca Airport, City of Boca Raton, and Florida Atlantic University (FAU). This improvement will provide connectivity between FAU, Tri-Rail and I-95 and alleviate daily congestion as well as accommodate traffic generated during events held at the FAU stadium.

Boynton Beach Various Locations, Palm Beach County – FDOT District 4
Project Engineer for this is a federally funded, MPO driven, off-system project to improve mobility along Boynton Beach Blvd. This project has two main corridors with various segments. The first segment runs along Boynton Beach Blvd, the existing travel lanes width will be reduced to provide an 11' and 10' travel lane in each direction with sharrows and an 11' and 15' shared use path. This segment also includes decorative lighting along the corridor. The second segment runs along NE 3rd St, Boynton Beach Blvd, and Ocean Ave providing sharrows. The main items included in the scope are, the accommodation of bicyclists.

City of Oakland Park Lakeside Sidewalks – Various Locations, Broward County – FDOT District 4
Project Engineer for this mobility project consisting of pedestrian improvements for the Lakeside neighborhood. Improvements include filling sidewalk gaps, drainage improvements, and signing and pavement markings.

SR 615/S 25th St from N of Edwards Rd to N of Virginia Ave, St. Lucie County – FDOT District 4
Project Engineer for this RRR project consisting of milling and resurfacing of the existing pavement to extend the service life of the corridor, as well as general highway safety enhancements. The project also includes lighting retrofit at the three signalized intersections and the addition reflectorized backplates.

SR 809/Military Trail from Dyer Blvd to N of Flag Dr, Palm Beach County – FDOT District 4
Project Engineer for this RRR project consisting of milling and

Project Management Institute

THIS IS TO CERTIFY THAT

MD SHAHINUR RAHMAN

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND PERFORMANCE IN ACHIEVING AN ORGANIZATIONAL OBJECTIVE THROUGH DEFINING AND OVERSEEING PROJECTS AND RESOURCES AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional (PMP)®

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE

Tony Appleby
Chair, Board of Directors

Sunil Prashara
President and Chief Executive Officer

PROJECT MANAGEMENT INSTITUTE CORPORATE SEAL 1969 PENNSYLVANIA

PMP® Number: 1474518
PMP® Original Grant Date: 17 December 2011
PMP® Expiration Date: 16 December 2023

Project Management Institute.

AdvanceOnline Solutions Online Institute

Certificate of Completion

MD Rahman

has met the online course completion requirements for

OSHA 30-Hour Construction Safety

This student has completed the formal instruction for the 30-Hour Construction Outreach Program. Topics covered in this program were Introduction to OSHA, Managing Safety and Health, Struck-by and Caught-In or Between Hazards, Personal Protective Equipment, Hearing Conservation, Respiratory Protection, Lead and Crystalline Silica, Asbestos, GHS Hazard Communication, Electrical Safety, Hand and Power Tools, Fall Protection, Ladder Safety, Excavations, Scaffolds, Crane Safety, Heavy Equipment, Forklift Safety, Materials Handling, Permit-Required Confined Spaces, Fire Safety, Welding and Cutting, Concrete and Masonry, Steel Erection, and Ergonomics.

As an OSHA Outreach Training Program trainer, I affirm that I have conducted this OSHA Outreach Training Program training class in accordance with OSHA Outreach Training Program requirements. I will document this class to my OSHA Authorizing Training Organization. Upon successful review of my documentation, I will provide each student their course completion card within 90 calendar days of the end of the class. — Rick Gleason

Instructor Rick Gleason
Course ID A0310
Certificate ID 15608_1672064

Date 3/22/2020 7:42:00 AM
Time Online 47:11:32
AdvanceOnline Solutions, Inc.
1811 Bering Drive, Suite 430
Houston, Texas 77057
www.advanceonline.com
(713) 621-1100

AdvanceOnline SOLUTIONS

C2. Reference for Current Projects

Underway Project/Running project (6 projects, Same owner)

Project Title and Location :

Project 1: Single Family Residential Home, 921 Lake Avenue, Lehigh Acres, Fl 33972 (STRAP:21-44-27-04-00016.0230)

Project 2: Single Family Residential Home,1515 East 9th Street, Lehigh Acres, Fl 33972 (STRAP:22-44-27-14-00046.0090)

Project 3: Single Family Residential Home,1218 Mckinley Avenue, Lehigh Acres, Fl 33972 (STRAP: 16-44-27-01-00002.0050)

Project 4: Single Family Residential Home,813 Clayton, Lehigh Acres, Fl 33972 (STRAP-21-44-27-01-00002.0190)

Project 5: Single Family Residential Home,815 Clayton, Lehigh Acres, Fl 33972 (STRAP-21-44-27-01-00002.0200)

Project 6: Single Family Residential Home,816 Maple Avenue, Lehigh Acres, Fl 33972 (STRAP-21-44-27-03-00011.0040)

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 1.2 Millon, March 2022 ($200,000 for each house)
Percent Complete : 98%
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : October, 2023

Name, Address and Telephone Number of Owner :
SARAH REAL ESTATE INVESTMENTS
6073 NW 167TH ST #C2
HIALEAH FL 33015
Owner of the organization:
Aniss Naanaa
(305) 303-3501
sarahtrading01@gmail.com

Designing Engineer and Address
LIS Engineering, LLC
21430 Palm Beach Blvd, Alva, FL 33920
(239) 693-9244

Reference for Completed project.

Project: 1

Project Title, Location, and Brief Description of Work Performed
Fence Upgrade Project - 2022
This project's scope is to replace the existing chain link fence with an eight-foot (8') wrought-iron picket fence.
Sherbondy park
380 Bahman Ave, Opa-locka, FL 33054

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 214,500 , July 2022
Date Complete : December 2022
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : Project already completed

Name, Address, Email address and Telephone Number of the Owner
City of Opa-Locka
Contact Person :
Carlos Gonzalez
CIP Project Manager, City of Opa-locka
Office: 305-953-2868 Ext 1451
Cellular: 305-986-3586
Email: cgonzalez@opalockafl.gov

Capital Improvements Program
780 Fisherman Street, 4th Floor
Opa-locka, FL 33054

Designing Architect/Engineer and Address:
Architect
2Plus Architect
260 Andalusia Ave, Coral Gables, FL 33134
Engineer :
SSN Enginering LLC
13899 Biscayne Blvd, North Miami Beach, FL 33181

Reference for Completed project.
Project: 2

Project Title, Location, and Brief Description of Work Performed
Fence Upgrade Project - 2023
This project's scope is to replace the existing chain link fence with an eight-foot (8') wrought-iron picket fence.
Ingram Park
2100 Burlington St, Opa-locka, FL 33054

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 158,140 , January 2023
Date Complete : September 2023
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : Project already completed

Name, Address, Email address and Telephone Number of the Owner
City of Opa-Locka
Contact Person :
Carlos Gonzalez
CIP Project Manager, City of Opa-locka
Office: 305-953-2868 Ext 1451
Cellular: 305-986-3586
Email: cgonzalez@opalockafl.gov

Capital Improvements Program
780 Fisherman Street, 4th Floor
Opa-locka, FL 33054

Designing Architect/Engineer and Address:
Architect
2Plus Architect
260 Andalusia Ave, Coral Gables, FL 33134
Engineer :
SSN Engineering LLC
13899 Biscayne Blvd, North Miami Beach, FL 33181

Reference for Completed project.
Project: 3

Project Title, Location, and Brief Description of Work Performed
Public Works Canopy Project
City of Lauderdale Lakes, FL
4300 N.W. 36th Street
Lauderdale Lakes, FL, 33319

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 100,000 , June 2023
Date Complete : October 2022
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : Project already completed
Name, Address, Email address and Telephone Number of the Owner
City of Lauderdale Lakes, FL

Contact Person :
Maqsood M Nasir, P.E. Director, Engineering Services & Construction Management
City of Lauderdale Lakes,
4300 NW 36th Street,
Lauderdale Lakes, FL 33319,
V: 954-535-2712

Designing Architect/Engineer and Address:
Engineer :

City of Lauderdale Lakes, FL
4300 N.W. 36th Street
Lauderdale Lakes, FL, 33319

Site pictures our Sub-Contractor



24" culvert installed

by AC TRENCH, CORP



42" culvert installed

by AC TRENCH, CORP

Site pictures for minor similer work by Safa Construction



Safa installed 18" RCP in six
(6) different locations





Safa restore pond bank for a private owen.
Contract cost : Five thousand



Safa intalled concete in Nine (9) different locations

Note: In this project Safe is not installed by culvert or restore the canal bank. This task will be done by the sub. Safa will installed the concrete pavement on top of the culvert.

C3. RESOURCES AND APPROACHES

Resources :

Safa consists of full of adequate resources for this project. In this project, most of work will be done the skilled subcontractor, who are working on this type of project for their living. The resource subdivisions are many based on different management organizations. It is our understanding in this project four (4) type of resources is significant. 1) Human resources 2) Material resources 3) Equipment resources 4) Financial resources/capacity.

1) Human resources: Safa Construction is full of capable and skilled labor firms. Two Professional Engineers will consciously assist the workers, guide them, and inspect their work. Safa has also a highly skilled project manager/ superintend who will coordinate with workers for their work and safety. See the list of major subcontractors for subcontractor information.
2) Material resources: Safa Construction will purchase all the materials as specified in the plan.
3) Equipment resources: Safa mostly rented the equipment from commercial equipment rental places. Safa has commercial accounts with equipment rental places.
4) Financial resources/capacity:

    1) Currently the SAFA construction has a working capital of 1.5M dollars.
    2) Bonding capacity of 3.5 million dollars.
    3) SAFA construction is a comparatively new company. However, in this short amount of time, we completed eight (8) public projects and six (6) single-family homes (finishing in November 2023). The net project cost for all of the projects is 1.7 million dollars. This is a proven record of financial stability and the flourishing of the company.

Approaches: (See the attached sketch below)



1) PHASE I –MOBILIZATION

STEP –1 INITIATE MOBILIZATION.

STEP –2 VERIFY EXISTING UTILITY AND PROTECT THOSE.

STEP –3 VERIFY PROPOSED AND EXISTING ELEVATION.

STEP –4 SHOP DRAWING SUBMITTAL.

STEP 5– INSTALL A TEMPORARY FENCE.

NO	REVISIONS	DATE	BY

SAFA CONSTRUCTION, LLC
11140 SW 57TH MNR
DAVIE, FL 33324
PH (954) 326-8295

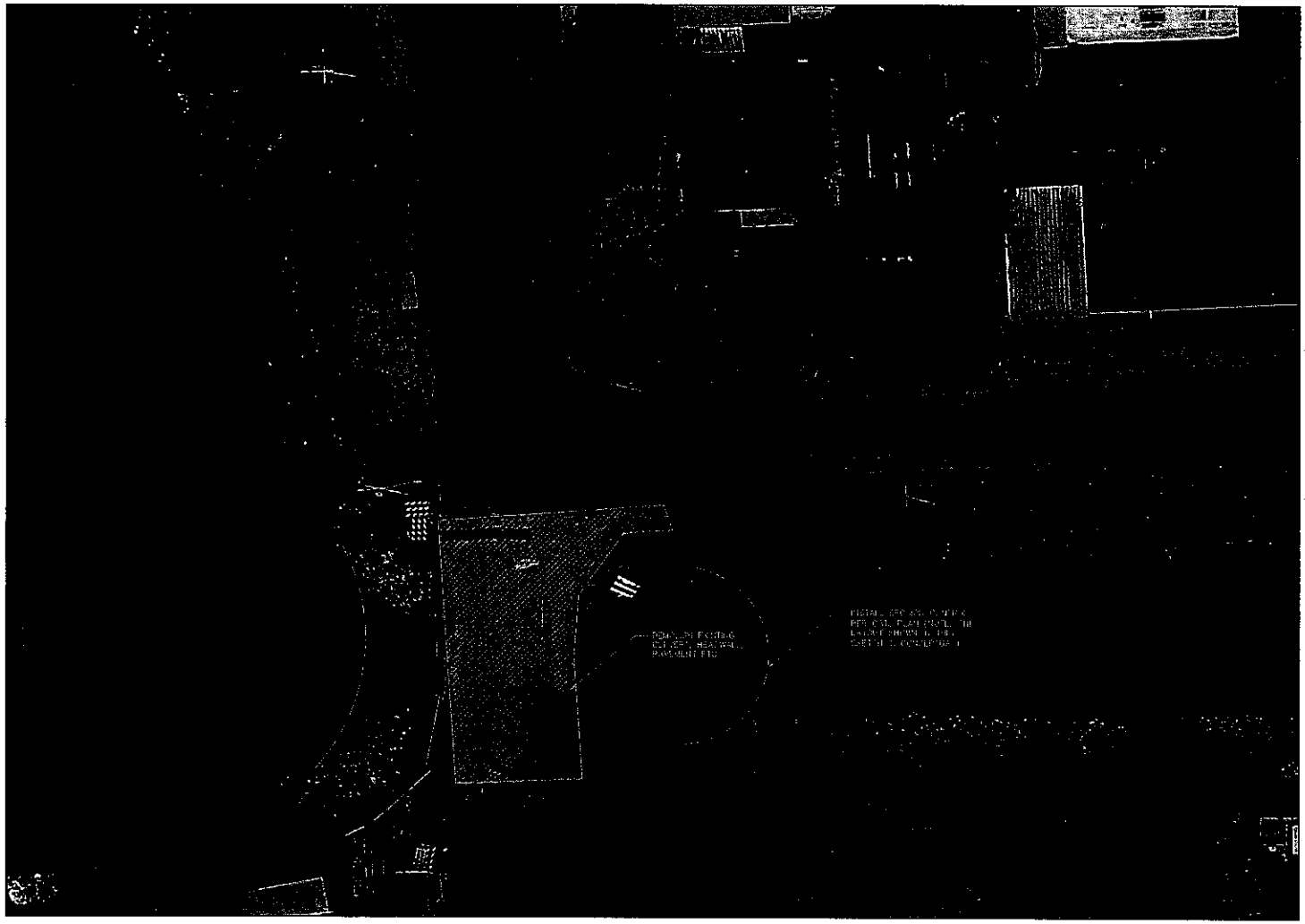
SAFA CONSTRUCTION, LLC

PROJECT NO.
2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI-DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -1



2) PHASE II –DEMOLITION (ASSUMING WET CONSTRUCTION)

STEP –1 INSTALLATION OF ALL EROSION CONTROL MEASURES.
STEP –2 REMOVE/DEMOLISH EXISTING CONCRETE PAVEMENT, HEADWALL, AND CULVERT PIPING.

NO.	REVISIONS	DATE	BY

SAFA CONSTRUCTION, LLC
11180 SW 17TH MNR
DAVIE, FL 33324
PH (954) 326-8236

SAFA CONSTRUCTION, LLC

PROJECT NO.
2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -2



3) PHASE III

STEP –1 INSTALL BACKFILL AND CULVERTS.
STEP –2 INSTALL CONCRETE HEADWALL AT PIPE ENDS AND INSTALL SAND CEMENT BAGS.
STEP –3 INSTALL NEW CONCRETE SHOULDER BARRIER AND GUARD RAILS.
STEP –4 SIDEWALK AND RIGID PAVEMENT

NO	REVISIONS	DATE	BY

SAFA CONSTRUCTION, LLC
11340 SW 17TH MNR
DAVIE, FL 33325
PH (954) 326-8291

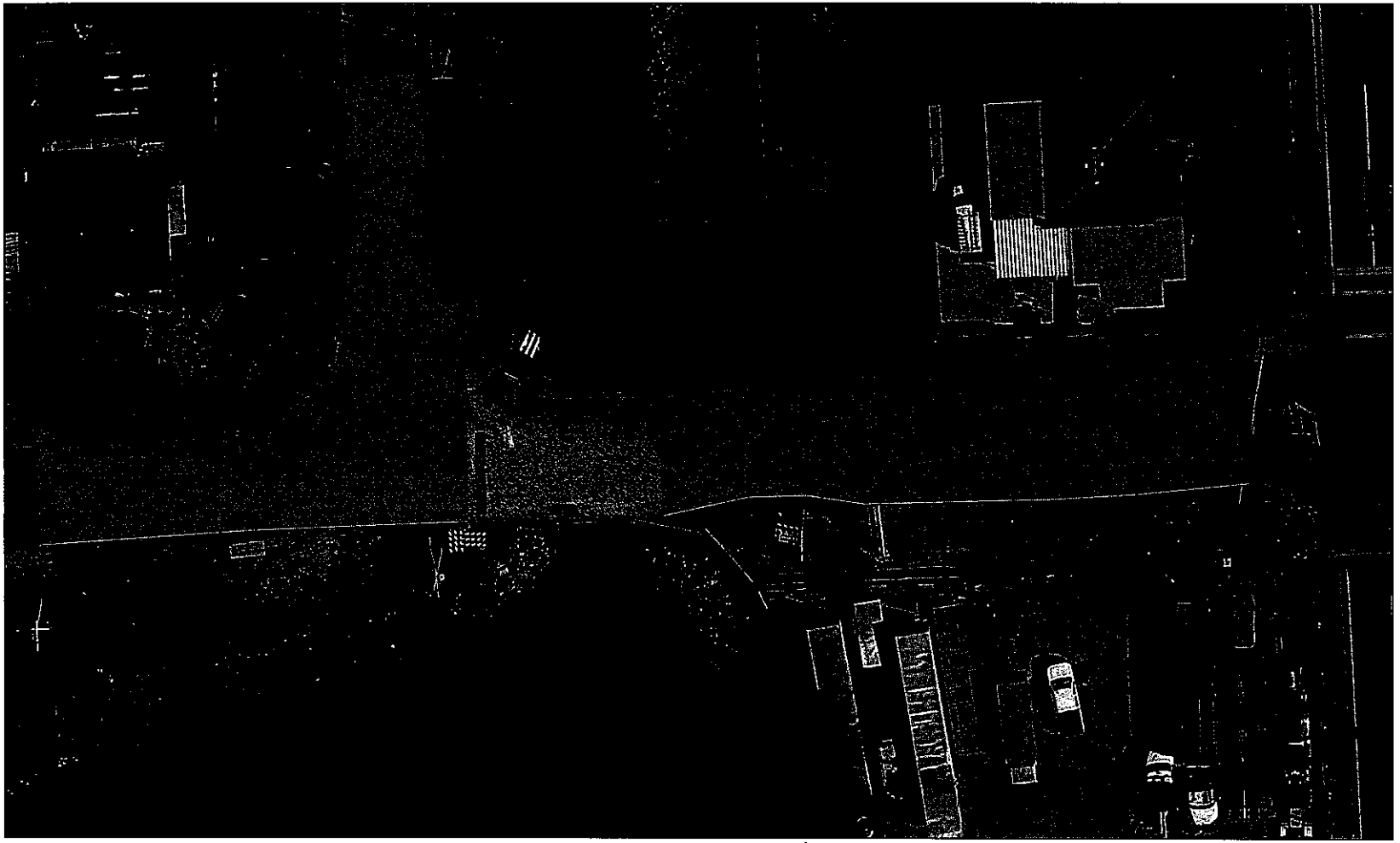
SAFA CONSTRUCTION, LLC

PROJECT NO.
2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -3



4) PHASE IV

STEP –1 MILL AND RESURFACE THE TOP 1" SURFACE COURSE OF THE ROADWAY AND RESTORE PAVEMENT MARKING.

STEP –2 DEMOBILIZATION AND RELATED CLOSEOUT ACTIVITIES.

NO.	REVISIONS	DATE	BY

SAFA CONSTRUCTION, LLC
11160 SW 17TH MNR
DAVIE, FL 33324
PH: (954) 320-8285

SAFA CONSTRUCTION, LLC

PROJECT NO.
2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI-DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -4

C4. Schedule

1) Demolition..... 1 week
2) Installation of the culvert, head wall etc..... 3 week
3) Installation rip-rap.....2 week
4) Installation of Rigid pavement.....1 week
5) Installation of flexible pavement.....1 week

Total **8 week or 2 months**

Note: Schudel compression (Combination of schedule crashing and fast-tracking) technique has been applied to the process faster.

C5. Price Proposal

THE CITY OF OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

TO THE COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA

Ladies and Gentlemen:

The undersigned bidder proposes to furnish all labor, tools, material and supplies, and to sustain all the expense incurred in doing the work set forth below that may be awarded the undersigned by the City of Opa-Locka, Florida, through its proper officers, and to do the same strictly in accordance with the plans and contract documents on file in the Office of the City Engineer of Opa-Locka, which are referred to below and made a part hereof, at the following combination of lump sum prices:

Item No.	Estimated Quantity	Description	Total
1.	Lump Sum (Divided into 2 or 4 payments See Measurement and Payment for Conditions)	For performing preparatory work and operations in mobilizing for beginning the work of the Project, but excluding materials and permit costs, both of which are paid under other payments items, the lump sum of _____ Dollars and _____ Cents	$ 20,000.00
2.	130 LF	For selling and delivering to the City 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert installation, the price per linear foot of 200.00 Dollars and Cents	$ 26,000.00

3.	130 LF	For installing 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert, price per linear foot of 800.00 Dollars and Cents	$ 104,000.00

Item No.	Estimated Quantity	Description	Total
4.	75 LF	For selling and delivering to the City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of 100.00 Dollars and Cents	$ 7,500.00
5.	75 LF	For installing City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of 200.00 Dollars and Cents	$ 15,000.00
6.	Lump Sum	For demolition and removal of existing three (3) 66-inch concrete pipe culvert with headwalls and retaining walls, the lump sump of _____ Dollars and Cents	$ 300,000.00
7.	670 CY	For the excavating of existing backfill material at existing Culvert location, the price per cubic yard of 150.00 Dollars and Cents	$ 100,500.00

8.	Lump Sum	For providing adequate bypass pumping to maintain uninterrupted Canal flow during construction, the price per lump sump of _____ Dollars and Cents	$ 50,000.00

Item No.	Estimated Quantity	Description	Total
9.	100 LF	For furnishing and installing all necessary Turbidity Barriers for erosion control measures specified on plans, the price per linear foot of 20.00 Dollars and Cents	$ 2,000.00
10.	2 Each	For furnishing and installing all necessary Drop Inlet Sediment Protection for erosion control measures specified on plans, the per unit of 5000.00 Dollars and Cents.	$ 10,000.00
11.	45 CY	For selling and delivering to the City Concrete for the installation of 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, the price per cubic yard of 350.00 Dollars and Cents.	$ 15,750.00
12.	45 CY	For constructing 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, as indicated in the Plans, the price per cubic yard of 150.00 Dollars and Cents.	$ 6,750.00

13.	405 SF	For furnishing and constructing 4-inch thick sidewalk and ramp curbing to match existing per FDOT index No. 310, the price per square foot of 5.00 Dollars and Cents.	$ 2,025.00

Item No.	Estimated Quantity	Description	Total
14.	150 SF	For constructing new concrete curb and gutter per FDOT index No. 300, the price per square foot of 10.00 Dollars and Cents.	$ 1,500.00
15.	200 CY (Contingent Item)	For furnishing and placing suitable Backfill (A-24 or better) required for Culvert placement, the price per cubic yard of 250.00 Dollars and Cents.	$ 50,000.00
16.	280 TON	For furnishing and installing Rubble (Broken Stone), including filter fabric, at Culvert embankment for the rip-rap installation as per FDOT Standard Specification No. 530, the price per ton of 1200.00 Dollars and Cents.	$ 336,000.00

17.	25 CY	For furnishing and installing sand-cement rip rap bags at culvert pipe ends per Miami-Dade County DTPW BC 3.4 & BC 3.5 for straight end pipes, the price per cubic yard of 500.00 Dollars and Cents.	$ 12,500.00

Item No.	Estimated Quantity	Description	Total
18.	45 CY	For furnishing and constructing concrete endwall for three (3) 66" barrel culvert installation as per FDOT index 430-032, the price per cubic yard of 500.00 Dollars and Cents.	$ 22,500.00
19.	65 LF	For furnishing and installing concrete shoulder barrier as per FDOT index No. 521-001, the price per linear foot of 200.00 Dollars and Cents.	$ 13,000.00
20.	1025 SY	For milling (nominal 1 inch thick), surface course for permanent paving repairs, the price per square yard of 18.00 Dollars and Cents.	$ 18,450.00
21.	1025 SY	For constructing for Type "V" permanent paving repairs as per details provided in plans, the price per square yard of 9.00 Dollars and Cents.	$ 9,225.00

22.	8 each	For replacing pavement markings damaged, removed, or obliterated by the contractor's operation, the price per unit of 150.00 Dollars and Cents.	$ 1,200.00

Item No.	Estimated Quantity	Description	Total
23.	40 SY (Contingent Item)	For restoring sodded area, the price per square yard of 100.00 Dollars and Cents.	$ 4,000.00
24.	Lump Sum	For providing full Traffic Control during construction, Maintenance of Traffic, the lump sum price of 5000.00 Dollars and Cents.	$ 5,000.00
25.	2100 SF (Contingent Item)	For sheeting and shoring ordered left in place by the Engineer, the price per square foot of 10.00 Dollars and Cents.	$ 21,000.00
26.	670 CY (Contingent Item)	For removal, transport and legal disposal of unsuitable backfill materials, including tipping fees, the price per cubic yard of 100.00 Dollars and Cents.	$ 67,000.00

27.	**Sub-Total – Bid Items 1 through 26**	$ 1,220,900.00	
Item No.	Estimated Quantity	Description	Total
28.	Dedicated Allowance	For providing uniformed, off-duty policemen for the purpose of maintenance of traffic, the aggregate sum of 50.00 Dollars and Cents.	$ 24,000.00
29.		For all cost of required permit fees, impact fees, if required by the Engineer, the sum of 3% of the Subtotal, Item 27 (0.03) x (Subtotal, Item 27) _____ Dollars and Cents.	$ 36,627.00
30.		For unforeseen conditions, for minor construction changes and for quantity adjustments, if ordered by the Engineer, the sum of 10% of the Subtotal, Item 27 (.10) x (Subtotal, Item 27) _____ Dollars and Cents.	$ 122,090.0

31.	**TOTAL BID – (Sum of Bid Item Nos. 27, 28, 29 and 30)**	$ 1,403,617.00	

Note: For a detailed description of each Quotation Item, refer to Section 01025 of the Specifications entitled "Measurement and Payment.

THE CITY OF OPA-LOCKA OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

The City of Opa-Locka reserves the right to waive any informality in any bid and to reject any or all bids.

TOTAL BASE BID PRICE FOR PROPOSAL (ITEMS 1 THROUGH 32): $ 1,403,617.00
(FIGURES)

One million four hundred thousand three thousand six hundred seventeen Dollars and

zero Cents

AMOUNTS SHALL BE SHOWN ON BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT SHOWN IN WORDS SHALL GOVERN FOR EACH BID ITEM AND TOTAL BASE BID.

Bidder acknowledges that included in the various items of the bid proposal and in the TOTAL BASE BID PRICE are costs for complying with the Florida Trench Safety Act, F.S. 553.60 et. seq. The Bidder by signing and submitting the Trench Safety Act Compliance Statement is, in writing, assuring that it will perform any trench excavation in accordance with applicable trench safety standards.

Contract award shall be based upon the total base bid price, as identified above, by the lowest responsive, responsible bidder.

SAFA CONSTRUCTION LLC

FIRM NAME (PRINT)

BIDDER'S SIGNATURE

SESAME STREET CULVERT REPLACEMENT

RFP#23-1016200

ADDENDUM-01

All Addendums will be posted on **www.Demandstar.com**

Please see attached Addendum #1 for Culvert Replacement revisions to the following were made:

- **Technical Specifications**
- **Engineering Opinion of Probable Cost**
- **Design Plans**

To view the revisions, please refer to the new attachments named "Revisions 1" for the latest updates to the Bid documents.

- **Revision 1 Opa Locka - Culvert Replacement - OPC – 20231003**
- **Revision 1 Opa Locka - Culvert Replacement - Bid Set - 20231004-**
- **Revision 1 Opa Locka - Culvert Replacement - Technical Specifications - 20231004-SS**

CITY OF OPA-LOCKA
SESAME STREET CULVERT REPLACEMENT WITHIN THE CITY AGREEMENT

THIS IS AN AGREEMENT, dated the_____day of_____, 2024, between:

THE CITY OF OPA-LOCKA, a Florida municipal corporation,
hereinafter "CITY"

and

SAFA CONSTRUCTION, LLC., a Florida Limited
Liability Company, hereinafter "CONTRACTOR."

WITNESSETH:

In consideration of the mutual terms and conditions, promises, covenants, and payments hereinafter set forth, CITY and CONTRACTOR agree as follows:

ARTICLE 1
PREAMBLE

In order to establish the background, context and form of reference for this Agreement and to generally express the objectives, and intentions, of the respective parties herein, the following statements, representations and explanations shall be accepted as predicates for the undertakings and commitments included within the provisions which follow and may be relied upon by the parties as essential elements of the mutual considerations upon which this Agreement is based.

1.1 CITY is in need of a CONTRACTOR to provide the services for the Sesame Street Culvert Replacement, within the City.

1.2 CONTRACTOR has a strong commitment to provide the services with the necessary experience, qualifications, references, resources, approach and price proposal.

1.3 CITY issued RFP NO. 23-1016200 (“RFP”), seeking a professional company with the knowledge and ability to perform the services sought.

1.4 At its meeting of, January 10, 2024, the CITY evaluated CONTRACTOR to perform the services needed to conduct a Sesame Street Culvert Replacement within the City and at the City Commission meeting of January 10, 2024, the City Commission selected CONTRACTOR to perform the needed work.

ARTICLE 2
SCOPE OF WORK

2.1 CONTRACTOR shall furnish all the materials, tools, supplies, and labor necessary to perform all of the work described in the Request for Qualifications RFP 23-1016200, a copy of which is attached hereto and specifically made a part of this Agreement as Exhibit "A", and the Scope of Services attached hereto as Exhibit “B”.

2.2 CONTRACTOR shall abide by all specifications outlined in RFP 23-1016200.

2.3 CONTRACTOR hereby represents to CITY, with full knowledge that CITY is relying upon these representations when entering into this Agreement with CONTRACTOR, and that CONTRACTOR has the professional expertise, experience and manpower to perform the services to be provided by CONTRACTOR as set forth in CONTRACTOR’s response to RFP.

2.4 CONTRACTOR assumes professional and technical responsibility for performance of its services to be provided hereunder in accordance with applicable recognized professional standards and relevant Florida Statutes.

ARTICLE 3
COMMENCEMENT OF SERVICES

3.1 The CONTRACTOR shall commence work as directed by CITY upon the effective date this Agreement is executed by both parties.

ARTICLE 4
COMPENSATION

4.1 CONTRACTOR will perform the services at a total cost to City of One Million, Two Hundred Thousand Dollars ($1,200,000.00) the Sesame Street Culvert Replacement within the City.

4.2 CONTRACTOR shall be solely responsible for and shall provide for the payment of workers compensation insurance coverage (with statutory limits and Employer's Liability coverage with limits not less than One Hundred Thousand Dollars ($100,000) (Including Policy Number and Policy Period) and premium, and all other insurance pursuant to Article 5 below, withholding taxes, FICA, pension and profit-sharing contributions, retirement contributions, if any, all remunerations; all labor contract compliance, and all other charges, fees, permits and expenses associated with the employment of such personnel provided by CONTRACTOR hereunder. CITY shall bear no responsibility for any such charge, fees, permits or expenses associated with the employment of such personnel by CONTRACTOR.

4.3 Payment to CONTRACTOR for all tasks and charges under this Agreement shall be based on the following conditions:

A. Disbursements. There are no reimbursable expenses associated with this Agreement.

B. Payment Schedule. Invoices received from CONTRACTOR pursuant to this Agreement will be reviewed by the appropriate financial staff. If services have been rendered in conformity with the Agreement, the invoice will be sent to the City of Opa-locka's Finance Department for payment and may need to be subsequently approved by the State of Florida.

C. Availability of Funds. CITY's performance and obligation to pay under this Agreement is contingent upon an annual appropriation from the CITY.

4.4 The making and acceptance of the final payment shall constitute a waiver of all claims by the CITY. It shall also constitute a waiver of all claims by the CONTRACTOR, except those previously made and still unsettled.

ARTICLE 5
CONTRACTOR'S LIABILITY INSURANCE

5.1 The CONTRACTOR shall not commence work under this contract until it has obtained all insurance required under this paragraph and such insurance has been approved by the CITY nor shall the CONTRACTOR allow any Subcontractor to commence work on his sub-contract until all similar such insurance required of the subcontractor has been obtained and approved.

5.2 Certificates of insurance, reflecting evidence of the required insurance, shall be filed with the CITY prior to the commencement of the work. These Certificates shall contain a provision that coverage afforded under these policies will not be canceled until at least thirty days (30) prior written notice has been given to the CITY. Policies shall be issued by companies authorized to do business under the laws of the State of Florida.

5.3 Insurance shall be in force until all work required to be performed under the terms of the Contract is satisfactorily completed as evidenced by the formal acceptance by the CITY. In the event the insurance certificate provided indicates that the insurance shall terminate and lapse during the period of this contract, then in that event, the CONTRACTOR shall furnish, at least thirty (30) days prior to the expiration of the date of such insurance, a renewed certificate of insurance as proof that equal and like coverage for the balance of the period of the contract and extension thereunder is in effect. The CONTRACTOR shall not continue to work pursuant to this contract unless all required insurance remains in full force and effect.

5.4 Comprehensive General Liability insurance to cover bodily injury liability and property damage liability with minimum limits of One Million Dollars ($1,000,000.00) per occurrences. Exposures to be covered are:

- Premises and Operation

- Products/Completed Operations
- Broad Form Property Damages
- Broad Form Contractual Coverage applicable to this specific Agreement, including any hold harmless and/or indemnification agreement.
- Personal Injury Coverage with Employee and Contractual Exclusions removed, with minim limits of coverage equal to those required for Bodily Injury Liability and Property Damage Liability.

Business Automobile Liability with minimum limits of One Million dollars ($1,000,000.00) per occurrence, combined single limit for Bodily Injury Liability and Property Damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability policy, without restrictive endorsements, and must include:

- Owned vehicles
- Hired and Non-Owned Vehicles
- Employers' Non-Ownership.

5.5 The CONTRACTOR shall hold the CITY, the City of Opa-Locka their agents, and employees, harmless on account of claims for damages to persons, property or premises arising out of the operations to complete this Agreement and name the CITY as an additional insured under their policy.

5.6 The CITY reserves the right to require any other insurance coverage it deems necessary depending upon the exposures.

ARTICLE 6
PROTECTION OF PROPERTY

6.1 At all times during the performance of this Contract, the CONTRACTOR shall protect the CITY's property and properties adjoining the Project site from all damage whatsoever on account of the work being carried on pursuant to this Agreement.

ARTICLE 7
CONTRACTOR'S INDEMNIFICATION

7.1 The CONTRACTOR agrees to release the CITY from and against any and all liability and responsibility in connection with the above-mentioned matters. The CONTRACTOR further agrees not to sue or seek any money or damages from CITY in connection with the above-mentioned matters, except in the event that the CITY fails to pay to CONTRACTOR the fees and costs as provided for in Article 4 herein.

7.2 The CONTRACTOR agrees to indemnify and hold harmless the CITY, its trustees, elected and appointed officers, agents, servants and employees, from and against any and all claims, demands, or causes of action of whatsoever kind or nature, and the resulting losses, costs, expenses, reasonable attorneys' fees, liabilities, damages, orders, judgments, or decrees, sustained by the CITY or any third party arising out of, or by reason of, or resulting from the

CONTRACTOR's negligent acts, errors, or omissions.

7.3 If a court of competent jurisdiction holds the CITY liable for certain tortuous acts of its agents, officers, or employees, such liability shall be limited to the extent and limit provided in 768.28, Florida Statutes. This provision shall not be construed as a waiver of any right or defense that the CITY may possess. The CITY specifically reserves all rights as against all claims that may be brought.

ARTICLE 8
INDEPENDENT CONTRACTOR

8.1 This Agreement does not create an employee/employer relationship between the parties. It is the intent of the parties that the CONTRACTOR is an independent contractor under this Agreement and not the CITY's employee for all purposes, including but not limited to, the application of the Fair Labor Standards Act minimum wage and overtime payments, Federal Insurance Contribution Act, the Social Security Act, the Federal Unemployment Tax Act, the provisions of the Internal Revenue Code, the State Workers Compensation Act, and the State unemployment insurance law. The CONTRACTOR shall retain sole and absolute discretion in the judgment of the manner and means of carrying out the CONTRACTOR's activities and responsibilities hereunder provided. This Agreement shall not be construed as creating any joint employment relationship between the CONTRACTOR and the CITY and the CITY will not be liable for any obligation incurred by CONTRACTOR, including but not limited to unpaid minimum wages and/or overtime premiums.

ARTICLE 9
CONTRACT BOND

9.1 The Contractor is required to furnish a Performance Bond and Payment Bond, each, in the amount of 100% of the total BID Price, including alternates if any, with the City of Opa-locka as the obligee, as security for the faithful performance of the contract and for the payment of all persons performing labor or furnishing materials in connection herewith.

The bonds shall be with a surety company authorized to do business in the State of Florida.

ARTICLE 10
CHANGES TO SCOPE OF WORK AND ADDITIONAL WORK

10.1 CITY or CONTRACTOR may request changes that would increase, decrease or otherwise modify the Scope of Services/Basic Services to be provided under this Agreement as described in Article 2 of this Agreement. Such changes or additional services must be in accordance with a written amendment, executed by the parties hereto, with the same formality and with equality and dignity prior to any deviation from the terms of this Agreement, including the initiation of any additional or extra work. Each amendment shall at a minimum include the following information on each project:

PROJECT NAME
PROJECT DESCRIPTION
ESTIMATED PROJECT COST
ESTIMATED COST FOR ADDITION OR CHANGE TO PROJECT CONTRACT
ESTIMATED PROJECT COMPLETION DATE

10.2 In no event will the CONTRACTOR be compensated for any work which has not been described in a separate written agreement executed by the parties hereto.

ARTICLE 11
TERM AND TERMINATION

11.1 This Agreement shall commence upon execution of this Agreement and shall be effective for one year.

11.2 This Agreement may be terminated by either party for cause, or the CITY for convenience, upon thirty (30) days written notice by the CITY to CONTRACTOR in which event the CONTRACTOR shall be paid its compensation for services performed to termination date. In the event that the CONTRACTOR abandons this Agreement or causes it to be terminated, he shall indemnify the CITY against any loss pertaining to this termination up to a maximum of the full contracted fee amount. All finished or unfinished documents, data, studies, plans, surveys, and reports prepared by CONTRACTOR shall become the property of CITY and shall be delivered by CONTRACTOR to CITY.

ARTICLE 12
CONTRACT DOCUMENTS

12.1 CONTRACTOR and CITY hereby agree that the following Specification and Contract Documents, which are attached hereto and made a part thereof, are fully incorporated herein and made a part of this Agreement, as if written herein word for word: this Agreement; RFP 23-1016200, Exhibit "A", and the CONTRACTOR's Response to RFP, attached hereto as Exhibit "B".

ARTICLE 13
MISCELLANEOUS

13.1 Legal Representation. It is acknowledged that each party to this Agreement had the opportunity to be represented by counsel in the preparation of this Agreement and, accordingly, the rule that a contract shall be interpreted strictly against the party preparing same shall not apply due to the joint contribution of both parties.

13.2 Assignments. This Agreement, or any interest herein, shall not be assigned, transferred or otherwise encumbered, under any circumstances, by CONTRACTOR without the prior written consent of CITY. For purposes of this Agreement, any change of ownership of CONTRACTOR shall constitute an assignment which requires CITY approval. However, this Agreement shall run to the CITY and its successors and assigns.

13.3 Records. CONTRACTOR shall keep books and records and require any and all subcontractors to keep books and records as may be necessary in order to record complete and correct entries as to personnel hours charged to this engagement, and any expenses for which CONTRACTOR expects to be reimbursed, if applicable. Such books and records will

be available at all reasonable times for examination and audit by CITY and shall be kept for a period of three (3) years after the completion of all work to be performed pursuant to this Agreement. Incomplete or incorrect entries in such books and records will be grounds for disallowance by CITY of any fees or expenses based upon such entries.

CITY is a public agency subject to Chapter 119, Florida Statutes. To the extent CONTRACTOR is acting on behalf of CITY pursuant to Section 119.0701, Florida Statutes, CONTRACTOR shall:

a. Keep and maintain public records that ordinarily and necessarily would be required to be kept and maintained by CITY were CITY performing the services under this agreement;

b. Provide the public with access to such public records on the same terms and conditions that the County would provide the records and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by law;

c. Ensure that public records that are exempt or that are confidential and exempt from public record requirements are not disclosed except as authorized by law; and

d. Meet all requirements for retaining public records and transfer to CITY, at no cost, all public records in possession of the CONTRACTOR upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt. All records stored electronically must be provided to the CITY.

e. **IF CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONSULTANT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (305) 953-2800, email: jflores@Opalockafl.gov OR BY MAIL: City of Opa-locka – City Clerk's Office, 780 Fisherman Street, Opa-Locka, FL 33054.**

13.4 Ownership of Documents. Reports, surveys, plans, studies and other data provided in connection with this Agreement are and shall remain the property of CITY.

13.5 No Contingent Fees. CONTRACTOR warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONTRACTOR, to solicit or secure this Agreement, and that it has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for CONTRACTOR, any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. For the breach or violation of this provision, the CITY shall have the right to terminate the Agreement without liability at its discretion, to deduct from the contract price, or otherwise recover the full amount of such fee, commission, percentage, gift or consideration.

13.6 Notice. Whenever any party desires to give notice unto any other party, it

must be given by written notice, sent by registered United States mail or national delivery service with verified confirmation. If by mail, with return receipt requested, addressed to the party for whom it is intended and the remaining party, at the places last specified, and the places for giving of notice shall remain such until they shall have been changed by written notice in compliance with the provisions of this section. For the present, the CONTRACTOR and the CITY designate the following as the respective places for giving of notice:

CITY: Darvin Williams, Interim City Manager
City of Opa-locka Municipal Complex
780 Fisherman Street, Fourth Floor
Opa-locka, FL 33054

Copy To: Burnadette Norris-Weeks, City Attorney
Burnadette Norris-Weeks, P.A.
401 North Avenue of the Arts
Fort Lauderdale, Florida 33311

Contractor:

MD Shahinur Rahman
Safa Construction, LLC.
11186 SW 17TH MNR
DAVIE, FL 33324

13.7 Binding Authority. Each person signing this Agreement on behalf of either party individually warrants that he or she has full legal power to execute this Agreement on behalf of the party for whom he or she is signing, and to bind and obligate such party with respect to all provisions contained in this Agreement.

13.8 Exhibits. Each Exhibit referred to in this Agreement forms an essential part of this Agreement. The exhibits if not physically attached should be treated as part of this Agreement and are incorporated herein by reference.

13.9 Headings. Headings herein are for convenience of reference only and shall not be considered on any interpretation of this Agreement.

13.10 Severability. If any provision of this Agreement or application thereof to any person or situation shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement, and the application of such provisions to persons or situations other than those as to which it shall have been held invalid or unenforceable shall not be affected thereby, and shall continue in full force and effect, and be enforced to the fullest extent permitted by law.

13.11 Governing Law. This Agreement shall be governed by the laws of the State of Florida with venue lying in Miami-Dade County, Florida.

13.12 Disputes. Any claim, objection, or dispute arising out of the terms of this Agreement shall be litigated in the Eleventh Judicial Circuit Court in and for Miami-Dade County.

13.13 Attorney's Fees. To the extent authorized by law, in the event that either party brings suit for enforcement of this Agreement, the prevailing party shall be entitled to attorney's fees and court costs in addition to any other remedy afforded by law.

13.14 Extent of Agreement. This Agreement together with Contract Documents, attached as an Exhibit hereto, as amended herein above represents the entire and integrated agreement between the CITY and the CONTRACTOR and supersedes all prior negotiations, representations or agreements, either written or oral.

13.15 Waiver. Failure of the CITY to insist upon strict performance of any provision or condition of this Agreement, or to execute any right therein contained, shall not be construed as a waiver or relinquishment for the future of any such provision, condition, or right, but the same shall remain in full force and effect.

13.16 E-Verify. In accordance with Florida Statutes §448.095, the Contractor, prior to commencement of services or payment by the City, will provide to the City proof of participation/enrollment in the E-Verify system of the Department of Homeland Security. Evidence of participation/enrollment will be a printout of the Company's "Company Profile" page from the E-verify system. Failure to be continually enrolled and participating in the E-Verify program will be a breach of contract which will be grounds for immediate termination of the contract by the City. The Contractor will not hire any employee who has not been vetted through E-Verify. The Contractor may not subcontract any work for the City to any subcontractor that has not provided an affidavit stating that the subcontractor does not employ, contract with or subcontract with an unauthorized alien.

13.17 Scrutinized Companies. Contractor hereby certifies that it: a) has not been placed on the Scrutinized Companies that Boycott Israel List, nor is engaged in a boycott of Israel; b) has not been placed on the Scrutinized Companies with Activities in Sudan List nor the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List; and c) has not been engaged in business operations in Cuba or Syria. If City determined that Contractor has falsely certified facts under this paragraph or if Contractor is found to have been placed on the Scrutinized Companies Lists or is engaged in a boycott of Israel after the execution of this Agreement, City will have all rights and remedies to terminate this Agreement consistent with Section 287.135, Florida Statutes, as amended. The City reserves all rights to waive the certifications required by this paragraph on a case-by-case exception basis pursuant to Section 287.135, Florida Statutes, as amended. City reserves all rights to waive the certifications required by this paragraph on a case-by-case exception basis pursuant to Section 287.135, Florida Statutes, as amended.

Contractor shall not enter into a contract with an entity which would give access to an individual's personal identifying information if: (1) the entity is owned by the government of a foreign country of concern; (2) the government of a foreign country of concern has a controlling interest in the entity; or (3) the entity is organized under the laws or has its principal place of business in a foreign country of concern Section 287.138(2) (a)-(c), Fla. Stat. (2023), under Chapter 2023-33, Laws of Florida.

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first written above.

City of Opa-Locka

ATTEST:

_____ BY: _____

Joanna Flores
City Clerk

Darvin Williams
Interim City Manager

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

_____

Burnadette Norris-Weeks, City Attorney

CONTRACTOR

WITNESSES:

_____ BY:_____
MD Shahinur Rahman, Manager
Safa Construction, LLC., a Florida
For Profit Corporation

_____

ATTEST:

_____
SECRETARY

STATE OF FLORIDA)
) SS:
COUNTY OF MIAMI-DADE)

BEFORE ME, an officer duly authorized by law to administer oaths and take acknowledgments, personally appeared _____ as _____, of a Florida corporation, and acknowledged executed the foregoing Agreement as the proper official of_____, for the use and purposes mentioned in it and affixed the official seal of the corporation, and that the instrument is the act and deed of that corporation.

IN WITNESS OF THE FOREGOING, I have set my hand and official seal at in the State and County aforesaid on this_____day of_____, 2024.

_____
NOTARY PUBLIC

My Commission Expires:

CITY OF OPA-LOCKA
CERTIFICATION OF PROPOSALS RECEIVED

REQUEST FOR PROPOSALS (RFP) NO. 23-1016200
SESAME STREET CULVERT REPLACEMENT

I, Joanna Flores, City Clerk of the City of Opa-locka, Florida, do hereby certify that sealed proposals were received by 2:00 p.m. on October 16, 2023, and opened at the Opa-locka Municipal Complex, 780 Fisherman Street, 4th Floor, Opa-locka, Florida at 3:00 p.m. this 17th day of October, 2023.

PROPOSALS RECEIVED

Name of Company	Total Base Bid
1. **Safa Construction Inc.** **11186 SW 17th MNR** **Davie, FL 33324** **Contact: MD Shahinur Rahman, President/CEO** **Tele: 954.326.8295** **Email: md.rahman@safaconstruction.net**	**$1,403,617.00**

Please note that the proposal submitted by Safa Construction Inc. was submitted via Demand Star (e-bid) and provided to the City Clerk's Office by Junior Bergel, City of Opa-locka Procurement Office.

I further certify that sealed proposal(s) were submitted and properly opened in my presence and the following:

Junior Bergel
Procurement Officer
City of Opa-locka

Joanna Flores, CMC
City Clerk
City of Opa-locka

SESAME STREET CULVERT REPLACEMENT

RFP#23-1016200

ADDENDUM-01

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Please see attached Addendum #1 for Culvert Replacement revisions to the following were made:

- **Technical Specifications**
- **Engineering Opinion of Probable Cost**
- **Design Plans**

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- **Revision 1 Opa Locka - Culvert Replacement - Bid Set - 20231004-**
- **Revision 1 Opa Locka - Culvert Replacement - Technical Specifications - 20231004-SS**

City of Opa-locka

RFP NO: 23-1016200

REQUEST FOR PROPOSALS (RFP)

SESAME STREET CULVERT REPLACEMENT

CITY OF OPA-LOCKA

CULVERT REPLACEMENT ALONG SESAME STREET BETWEEN NW 135th STREET AND ATLANTIC AVE

SEPTEMBER 2023

3

UTILITY PROVIDERS

MIAMI DADE WATER & SEWER
MIAMI-MADE WATER & SEWER DEPARTMENT
3575 SOUTH LEJEUNE ROAD
MIAMI, FL 33146
CONTACT: MR. LAZARO GUERRA
PHONE: (786) 268-5273

POWER
FLORIDA POWER & LIGHT
10705 QUAIL ROOST DR.
MIAMI, FL 33157
CONTACT: EDGAR AGUILAR
PHONE: (305) 378-2634

TELEPHONE
AT&T/DISTRIBUTION
6626 LAKESIDE RD
WEST PALM BEACH, FL, 33411
CONTACT: DINO FARRUGGIO
PHONE: (561) 683-2729

STORM DRAINAGE PERMITING
MIAMI DADE COUNTY DEPARTMENT OF REGULATORY & ECONOMIC RESOURCES
701 NW 1ST COURT
MIAMI, FL 33166
PHONE: (305) 372-6789

GAS
FLORIDA CITY GAS
4045 NW 97TH AVE
DORAL, FL 33178
CONTACT: MR. GUSTAVO PEÑA
PHONE: (305) 835-3618

CABLE
VERIZON
3301 MATRIX DRIVE SUITE 100
RICHARDSON, TX 75082
CONTACT: TODD MARS
PHONE: (786) 236-8597

DESIGN TEAM

CIVIL ENGINEER
300 ENGINEERING GROUP
2222 PONCE DE LEON BLVD, SUITE 300
CORAL GABLES, FL 33134

SURVEYOR
BELLO & BELLO LAND SURVEYING CORP.
2230 SW 131ST AVE., SUITE 201
MIAMI, FL 33186

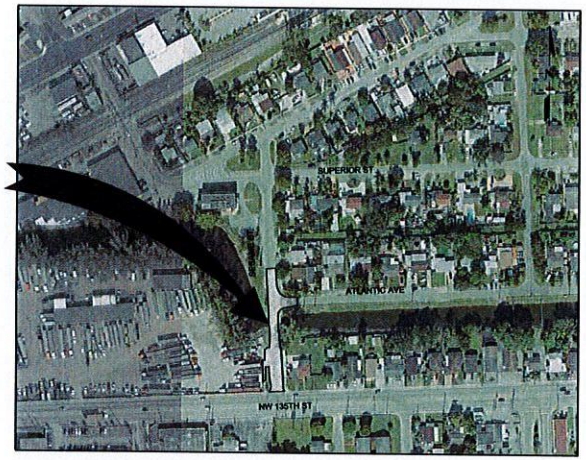
OWNER
CITY OF OPA LOCKA
780 FISHERMAN STREET,
4TH FLOOR OPA-LOCKA, FL 33054

GEOTECHNICAL
UNIVERSAL ENGINEERING SCIENCES
1215 WALLACE DRIVE
DELRAY BEACH, FLORIDA 33444

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S.S.O.C.O.F. DESIGN TICKET No.342105404-000

PROJECT LOCATION



LOCATION PLAN
MIAMI-DADE COUNTY PORTION OF SW 1/4 OF
SEC. 21 - TWP. 52 - RGE 41 E.
N.T.S.

COMMUNITY OFFICIALS

VERONICA J. WILLIAMS, MAYOR

JOHN H. TAYLOR JR., VICE MAYOR
DR. SHERELEAN BASS, COMMISSIONER
CHRIS DAVIS, COMMISSIONER
AUDREY DOMINGUEZ, COMMISSIONER

SHEET INDEX

G-01	TITLE SHEET, LOCATION AND LIST OF DRAWINGS
G-02	ABBREVIATION, SYMBOLS, GENERAL NOTES AND LEGEND
C-01	DEMOLITION AND EROSION CONTROL PLAN
C-02	DEMOLITION AND EROSION CONTROL NOTES AND DETAILS
C-03	PROPOSED SITE PLAN
C-04	PAVEMENT RESTORATION PLAN
C-05	PAVEMENT MARKINGS & SIGNAGE PLAN
C-06	MOT PLAN
C-07	MOT DETAILS
C-08	STANDARD DETAILS
C-09	STANDARD DETAILS
C-10	STANDARD DETAILS
C-11	STANDARD DETAILS
S-1	PIPE CULVERT STRUCTURAL DETAILS (1 OF 2)
S-2	PIPE CULVERT STRUCTURAL DETAILS (1 OF 2)

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY REINALDO RIVERA, PE. ON 9/8/23.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

REINALDO J. RIVERA LICENSE No. 83476 STATE OF FLORIDA PROFESSIONAL ENGINEER

Reinaldo J. Rivera, P.E.
Civil Engineer
STATE OF FLORIDA - LICENSE NO. 83476
2222 PONCE DE LEON BLVD, SUITE 300
CORAL GABLES, FLORIDA 33134
(305) 753-2605

AIRIA AUSTIN
PUBLIC WORKS & CIP DIRECTOR
CITY OF OPA-LOCKA PUBLIC WORKS DEPARTMENT
780 FISHERMAN STREET
OPA-LOCKA, FL 33054

300 ENGINEERING GROUP, L.L.C.
2222 PONCE DE LEON BLVD SUITE 300
CORAL GABLES, FL 33134
305.902.4602
www.300engineering.com

BID SET

A.D.	D.S.	R.R.	20-0324200
R.E.	9/8/23	SHEET	1 OF 15
OPA-LOCKA-G-01.DWG		DWG. NO.	G-01

GENERAL NOTES:

I. APPLICABLE CODES

A. GENERAL

1. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR THE INCLUSIVENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO IDENTIFY, LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT DIGGING) INFORMATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK.
2. ALL WORK FOR THIS PROJECT SHALL BE COMPLETED WITHIN AND FROM EXISTING RIGHT-OF-WAY.
3. THE FDOT INDICES REFERRED TO IN THE DRAWINGS AND NOTES REFERS TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND FDOT DESIGN STANDARDS LATEST EDITION.
4. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST STANDARDS, CODES, REGULATIONS AND SPECIFICATIONS OF THE CITY, COUNTY, STATE, AND FEDERAL CODES WHERE APPLICABLE.
5. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, ORDINANCES AND REGULATIONS.
6. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATIONS BOOKLET THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION TO THE ENGINEER.
7. ALL HANDICAP RAMPS AND ACCESS TO COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) REGULATIONS, AND FEDERAL CODES LATEST EDITIONS.
8. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL APPLICABLE CHARGES, TAXES, POSTALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.
9. FACH DIMENSIONS AND ELEVATIONS ARE TO BE EDGE OF PAVEMENT AND FINISH GRADE UNLESS NOTED OTHERWISE.
10. IF ABANDONED GAS, WATER, AND SEWER SERVICE LATERALS ARE ENCOUNTERED DURING EXCAVATION, THE SECTION IN THE EXCAVATED ENVELOPE WILL BE REMOVED AND THE STUB ON THE SIDE CONNECTED TO THE MAIN WILL BE CAPPED, PLUGGED OR OTHERWISE SEALED.
11. CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AND RESIDENTIAL LOCATIONS BY NORMAL MEANS AND METHODS, I.E. TEMPORARY STEEL PLATES, LIMEROCK, ETC. ALL ASSOCIATED COST TO BE INCLUDED IN W.O.T.
12. ITEMS IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES PAVEMENT AND BASE AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE UNLESS THE ITEMS ARE TO BE REUSED ON THE PROJECT.
13. EXCESS MATERIAL REMOVED BY THE CONTRACTOR WILL BE DISPOSED OF IN AREAS PROVIDED BY THE CONTRACTOR.
14. THE INFORMATION PROVIDED IN THESE PLANS ARE TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE SITE CONDITIONS, INCLUDING BOTH THE SURFACE AND SUBSURFACE CONDITIONS AND BASE THEIR PRICING ACCORDINGLY. THE GEOTECHNICAL REPORT IS INCLUDED IN THE CONTRACT DOCUMENTS.
15. CONTRACTOR SHALL PRESERVE ALL STREET SIGNS, MONUMENTS, TRAFFIC CONTROL SIGNS, LANDSCAPING, ETC. WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REINSTALL OR DELIVER SAID PUBLIC PROPERTY TO THE TOWN.
16. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF ANY SPECIAL EQUIPMENT SHORING, SHEETING OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING EXCAVATION OF SUBSOIL MATERIAL OR DURING THE FILLING OF ANY AREA, OR FOR ANY AREA, OR FOR ANY OPERATION DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
17. APPARENT ERRORS, DISCREPANCIES OR OMISSIONS ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
18. THE AMOUNT OF EACH OF THE MATERIALS PROVIDED IS THE ESTIMATED AMOUNT REQUIRED TO COMPLETE THE JOB. THESE QUANTITIES ARE ESTIMATED ONLY AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETE THE JOB IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. SHOULD ADDITIONAL MATERIALS BE REQUIRED THEY WILL BE PAID FOR AT THE CONTRACT UNIT PRICES AS DESCRIBED IN THE BID PROPOSAL.
19. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT REMAIN IN PLACE.
20. ALL ROAD CROSSINGS ARE OPEN CUT UNLESS OTHERWISE NOTED ON THE DRAWINGS.
21. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
22. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT WITHOUT OBTAINING WRITTEN PERMISSION FROM THE OWNER.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION ACCIDENTALLY OR PURPOSELY, CAUSED TO ANY IRRIGATION SYSTEMS, PRIVATE OR PUBLIC WITHIN THE PROJECT LIMITS. THE COSTS TO REPLACE, REMOVE OR MODIFY IRRIGATION PIPES, SPRINKLER HEADS OR OTHER RELATED APPURTENANCES SHALL BE CONSIDERED INCIDENTAL TO AND SHALL BE INCLUDED IN THE OTHER ITEMS OF RELATED WORK. ALL COSTS DUE TO DAMAGE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS OF EXISTING PAVEMENT TYPES, CONCRETE CURBS, CABLES, WIRES, ETC. LANGUAGE SHALL BE INCLUDED IN THE CONTRACT DOCUMENTS THAT NOTIFY THE CONTRACTOR THAT HE SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PAVEMENT, CURBS, ETC. PRIOR TO BEGINNING WORK IN ANY AREA.
25. CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REINSTALLING ALL BRICK OR PAVER DRIVEWAYS IMPACTED BY CONSTRUCTION, REPAIR OR REPLACE ALL ASPHALT, CONCRETE, OR STAMPED CONCRETE DRIVEWAYS IMPACTED BY CONSTRUCTION. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED AS PART OF THE OVERALL BID.
26. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS CONTRACTORS TO A CONDITION AT LEAST EQUAL (DETERMINED BY THE ENGINEER OF RECORD) TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.
27. CONTRACTOR SHALL ADJUST ALL UTILITY SURFACE FEATURES SUCH AS EXISTING FRAMES, GRATES, MANHOLE COVERS, UTILITY VALVE BOXES, MONITORING WELLS, ECT. TO MATCH PROPOSED GRADES.
28. ALL INSTALLATIONS WITHIN MIAMI-DADE COUNTY RIGHT-OF-WAY SHALL BE IN CONFORMITY WITH THE MIAMI-DADE COUNTY HIGHWAY CONSTRUCTION & ENGINEERING DIVISION "MINIMUM STANDARDS."
29. THE CITY OF OPA-LOCKA SHALL RECEIVE A COPY OF ALL REQUIRED DENSITY REPORTS, AS-BUILTS, AND SHOP DRAWINGS OF THE PROJECT.

B. CONSTRUCTION SAFETY

1. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER SPECIFICALLY THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL (MUTCD)
C. TRENCH SAFETY ACT
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF FLORIDA TRENCH SAFETY ACT.
3. WHERE EXCAVATIONS TO A DEPTH IN EXCESS OF FIVE FEET (5') ARE REQUIRED, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE BID:
   3.1. A REFERENCE TO THE TRENCH SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
   3.2. WRITTEN ASSURANCES BY THE CONTRACTOR PERFORMING THE TRENCH EXCAVATION THAT SUCH CONTRACTOR WILL COMPLY WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
   3.3. A SEPARATE ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY STANDARDS, WHEN A DEPTH IS NOT SUBMITTED, THE CONTRACTOR SHALL SUBMIT THE INFORMATION LISTED IN ITEM 2 TO THE ENGINEER PRIOR TO STARTING WORK.
D. SURVEY DATA
1. ALL ELEVATIONS ON THE PLANS, OR REFERENCED IN THE SPECIFICATIONS, ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929.
2. ALL EXISTING CONTROL POINTS AND/OR REFERENCE MARKERS SHALL BE RAISED TO FINAL GRADE. THESE POINTS AND REFERENCE MARKERS SHALL BE LOCATED AND NOTED ON THE AS-BUILTS.
3. THE LOCATION OF EXISTING RIGHT-OF-WAY LINES, CENTERLINES, ROADWAY PAVEMENT, UTILITIES, TREES, AND OTHER PHYSICAL ABOVE-GROUND FEATURES SHOWN ON THE PLANS WERE TAKEN FROM THE SPECIFIC PURPOSE SURVEYS PREPARED BY:
   BELLO & BELLO LAND SURVEYING
   12210 SW 131 AVENUE, SUITE 201
   MIAMI, FLORIDA 33186
   PHONE: 305-251-6031
   CONTACT: DAVID S. BELLO, PSM

II. PRECONSTRUCTION RESPONSIBILITIES

A. GENERAL

1. UPON RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE REPRESENTATIVES OF UTILITY OWNERS, AND THE ENGINEER OF RECORD, AND HOLD THE MANDATORY PRE-CONSTRUCTION CONFERENCE AFTER ISSUANCE OF THE CONTRACT'S "NOTICE TO PROCEED" BUT BEFORE THE ACTUAL CONSTRUCTION DATE. CONTRACTOR MAY NOT BEGIN WORK BEFORE ACTUAL CONSTRUCTION DATE.
2. THE CONTRACTOR SHALL OBTAIN A SUNSHINE CERTIFICATION NUMBER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
3. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
4. EXISTING UTILITY LOCATION SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH IT FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
6. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
7. EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER.
8. THE CONTRACTOR SHALL COORDINATE WITH UTILITIES TO ARRANGE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURE ETC. AS NECESSARY TO COMPLETE THE WORK.
9. THE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR TWO (2) BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
10. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.

III. INSPECTIONS

A. GENERAL

1. THE CONTRACTOR SHALL GIVE THE ENGINEER OF RECORD A MINIMUM OF TWO (2) BUSINESS DAYS ADVANCE NOTICE PRIOR TO BACKFILLING OR COMPLIANCE, THE INSPECTION OF THE FOLLOWING ITEMS SO THE ENGINEER OF RECORD CAN PERFORM FIELD OBSERVATIONS OF THE FOLLOWING ITEMS.
   1.1. STORM DRAINAGE
   1.2. SUBGRADE, SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK
   1.3. LIMEROCK BASE, SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT.
   1.4. ASPHALTIC CONCRETE
   1.5. FINAL
2. ALL INSPECTIONS WILL BE MADE BY THE COUNTY AND THE CITY OF OPA-LOCKA (PLUMBING AND ELECTRICAL). THE ENGINEER OF RECORD WILL PROVIDE CONSTRUCTION OBSERVATION SERVICES.
3. IF THE CONTRACTOR FAILS TO NOTIFY THE ENGINEER OF RECORD PRIOR TO COMPLETING THE ABOVE, THE ENGINEER RESERVES THE RIGHT NOT TO ISSUE ANY CERTIFICATIONS OR FINAL INSPECTIONS.

IV. SHOP DRAWINGS

A. GENERAL

1. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD FOR DRAINAGE PIPES AND OTHER ACCESSORIES.

V. TEMPORARY FACILITIES

A. TEMPORARY UTILITIES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY TO ITS EMPLOYEES AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.

B. TRAFFIC REGULATION

1. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MUTCD. A MAINTENANCE OF TRAFFIC (MOT) PLAN MUST BE APPROVED BY THE CITY/COUNTY ENGINEERING DIVISION HAVING JURISDICTION FOR THE SECTION OF ROADWAY BEFORE STARTING ANY WORK IN THE PUBLIC RIGHT-OF-WAY.
2. ALL OPEN TRENCHES ADJACENT TO OPEN TRAFFIC LANES OR ROADWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
3. TRAFFIC LANES TO VEHICLE AND PEDESTRIANS, OR BOTH SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESSED PERMISSION OF THE CITY.

C. TEMPORARY FACILITIES

1. THE CONTRACTORS ON-SITE EQUIPMENT, STOCKPILED MATERIAL, AND SUPPLIES SHALL BE KEPT IN A SECURE, FENCED AND LOCKED LOCATION WHEN THE CONTRACTOR IS NOT SUPERVISING THE STAGING OR LAY DOWN AREA.
2. STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON ABUTTING PRIVATE PROPERTY OR PUBLIC PROPERTY OR PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL FROM THE OWNER.
3. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY STREET LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION SITE TO THE SAME LEVEL AS EXISTED AT THE SAME LIGHTING INTENSITY LEVELS AS WAS EXISTING PRIOR TO THE START OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION AND MAINTAINING LIGHTING TO BE INCLUDED IN M.O.T. PAY ITEM.
4. THE CONTRACTOR SHALL COORDINATE SELECTION AND REMOVAL OF ANY PROPOSED STAGING AREAS ASSOCIATED WITH THIS PROJECT WITH THE CITY OF OPA-LOCKA

VI. PROJECT CLOSEOUT

A. CLEANING UP

1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER AND FREE OF ACCUMULATIONS OF DEBRIS FROM THE WORK SITE CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN.
2. THE CONTRACTOR SHALL REPAIR OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER OR THOSE OF ITS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL OR BETTER TO THE EXISTING CONDITION IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THIS END, THE CONTRACTOR SHALL DO ALL NECESSARY HIGHWAY OR DRIVEWAY, WALK AND LANDSCAPING WORK, SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
3. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, OR BASINS, OR ON ANY ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.
4. UPON COMPLETION OF THE PROPOSED CULVERT AREA WORK, THE CONTRACTOR SHALL CLEAN THE NEW SYSTEM, REMOVE ALL DEBRIS AND SILT FROM THE NEW SYSTEM AND CLEAN THE NEARBY AREAS AND DRAINAGE STRUCTURES NO ADDITIONAL COST TO THE OWNER.

B. PROJECT RECORD DOCUMENTS

1. THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF WORK ITEMS COMPLETED.
2. PRIOR TO THE PLACEMENT OF ANY ASPHALT OR CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER "AS-BUILT" PLANS (SIGNED AND SEALED BY A FLORIDA CERTIFIED PROFESSIONAL LAND SURVEYOR) SHOWING THE CULVERT AND ITS NEW APPURTENANCE IMPROVEMENTS, PAVING OPERATIONS SHALL NOT COMMENCE UNTIL THE ENGINEER HAS APPROVED THE "AS-BUILTS."
3. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR SUB-GRADE SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING BASE MATERIAL.
4. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR LIMEROCK SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING ASPHALT.
5. ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO SATISFY THE ENGINEER THAT THE INFORMATION PROVIDED A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.
6. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD COMPLETE SETS OF "AS-BUILT" CONSTRUCTION DRAWINGS (SIGNED AND SEALED BY A FLORIDA CERTIFIED PROFESSIONAL LAND SURVEYOR) AS REQUIRED FOR SUBMITTAL AND APPROVAL. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
7. THE COST OF SIGNED AND SEALED AS-BUILTS AND CADD FILES SHALL BE INCLUDED IN THE COST OF THE OVERALL BID.

VII. EARTHWORK

A. GENERAL

1. NONE OF THE EXISTING MATERIAL IS TO BE INCORPORATED IN THE LIMEROCK BASE.
2. ALL SUB-GRADE UNDER PAVED AREAS SHALL BE 12" THICK AND HAVE A MINIMUM LBR VALUE OF 40, AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
3. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
4. A 2" BLANKET OF TOPSOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED.
5. PROPERTIES DAMAGED SOD SHALL BE REPLACED WITH SAME SOD TYPE AS EXISTING AND SHALL BE PLACED ON THE GRADED TOPSOIL AND WATERED TO ENSURE SATISFACTORY CONDITION FLUSH THE ACCEPTANCE OF THE PROJECT.
6. WHEN WORKING IN AND AROUND EXISTING DRAINAGE CANALS OR LAKES, APPROPRIATE SILT/TURBIDITY BARRIERS SHALL BE INSTALLED.
7. ALL ORGANIC AND OTHER UNSUITABLE MATERIAL UNDER THOSE AREAS TO BE PAVED SHALL BE REMOVED TO A DEPTH OF THREE(3) FEET BELOW FINISHED GRADE AND FOR THREE(3) FEET BEYOND THE PERIMETER OF THE PAVING.
8. SUITABLE BACKFILL SHALL BE MINIMUM LBR 40 MATERIALS COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 THREE (3) FEET BEYOND THE PERIMETER OF PAVING.
9. CONTRACTOR SHALL BLEND TO EXISTING GRADE BEYOND THE LIMITS OF THE PROPOSED GRADE PROVIDED TO EXISTING GRADE AT LIMITS OF WORK UNLESS OTHERWISE NOTED ON PLANS. IF NO LIMIT OF WORK IS PROVIDED, BLEND TO THE ADJACENT PROPERTY LINE OR RIGHT-OF-WAY LINE AS APPLICABLE.
10. SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1 OF THE REQUIRED ELEVATION AS SHOWN ON THE PLANS AND ALL AREAS SHALL BE GRADED TO DRAIN WITHOUT PONDING.
11. GROUND ADJACENT TO ROADWAY PAVEMENT WHERE STORMWATER FLOWS FROM PAVEMENT TO GROUND, SHALL BE GRADED TWO (2) INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.
12. ALL AREAS TO BE CONSTRUCTED UPON WITH STRUCTURES, PAVEMENT, DRAINAGE, WATER, SEWER, CURBING, SIDEWALK, FENCING, ETC., SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL OF AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH, AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 6 INCHES. ALL WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
13. ALL PROPOSED GRADES SHOWN IN PLAN ARE FINISHED GRADES.

VIII. PAVING

A. GENERAL

1. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF THE LIMEROCK BASE AND PRIOR TO THE PLACEMENT OF THE PAVEMENT. ALL REPAIRS TO EXISTING PAVEMENT SHALL RECEIVE SAW-CUT EDGES PRIOR TO RELAYING ASPHALT. ALL EXISTING PAVEMENT, LIMEROCK AND SUB-GRADE THAT IS AFFECTED AND NOT PART OF THE CONSTRUCTION PROJECT SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.

B. MATERIALS

1. LIMEROCK BASE MATERIAL SHALL HAVE A MINIMUM OF 70% CARBONATES (CALCIUM AND MAGNESIUM) WITH A MINIMUM LBR OF 100.
2. PRIME COAT SHALL BE APPLIED AT THE RATE OF 0.25 GAL/YD SQ. AND TACK COAT SHALL MEET FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS.
3. SURFACE COURSE SHALL BE EQUAL TO FDOT TYPE SP 9.5 & SP 12.5 ASPHALTIC CONCRETE

C. INSTALLATION

1. LIMEROCK BASE MATERIAL SHALL BE 12" THICK AND COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
2. LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS (BASES GREATER THAN 6" OF LIMEROCK SHALL BE PLACED IN TWO OR MORE EQUAL LIFTS) LIMEROCK BASE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
3. ASPHALTIC CONCRETE SHALL BE 1" FDOT TYPE SP-9.5 (BOTTOM) AND 1" SP-12.5 FOR LIFT MATCHING EXISTING GRADES, 1" SLAB SMOOTH.
4. PRIME COAT SHALL BE PLACED ON THE LIMEROCK BASES IN ACCORDANCE WITH FDOT STANDARDS
5. TACK COAT SHALL BE PLACED AS REQUIRED IN ACCORDANCE WITH FDOT STANDARDS.
6. BASE COURSE CONSTRUCTION SHALL NOT BE STARTED UNTIL ALL UNDERGROUND CONSTRUCTION IN THE ROADWAY HAS BEEN TESTED AND ACCEPTED.
7. WEARING COURSE'S SHALL NOT BE PLACED UNTIL:
   7.1. A WALK-THROUGH HAS BEEN CONDUCTED TO DETERMINE IF THERE IS ANY REMAINING WORK THAT MIGHT CAUSE DAMAGE TO THE FINAL LIFT.
   7.2. ALL LANDSCAPING THAT MIGHT CAUSE DAMAGE TO THE FINAL LIFT IS COMPLETE.
   7.3. ALL UNDERGROUND UTILITIES ARE INSTALLED AND ACCEPTED AND A FINISHED ROCK SURVEY HAS BEEN SUBMITTED TO AND ACCEPTED BY THE HIGHWAY CONSTRUCTION & ENGINEERING DIVISION.

D. TESTING

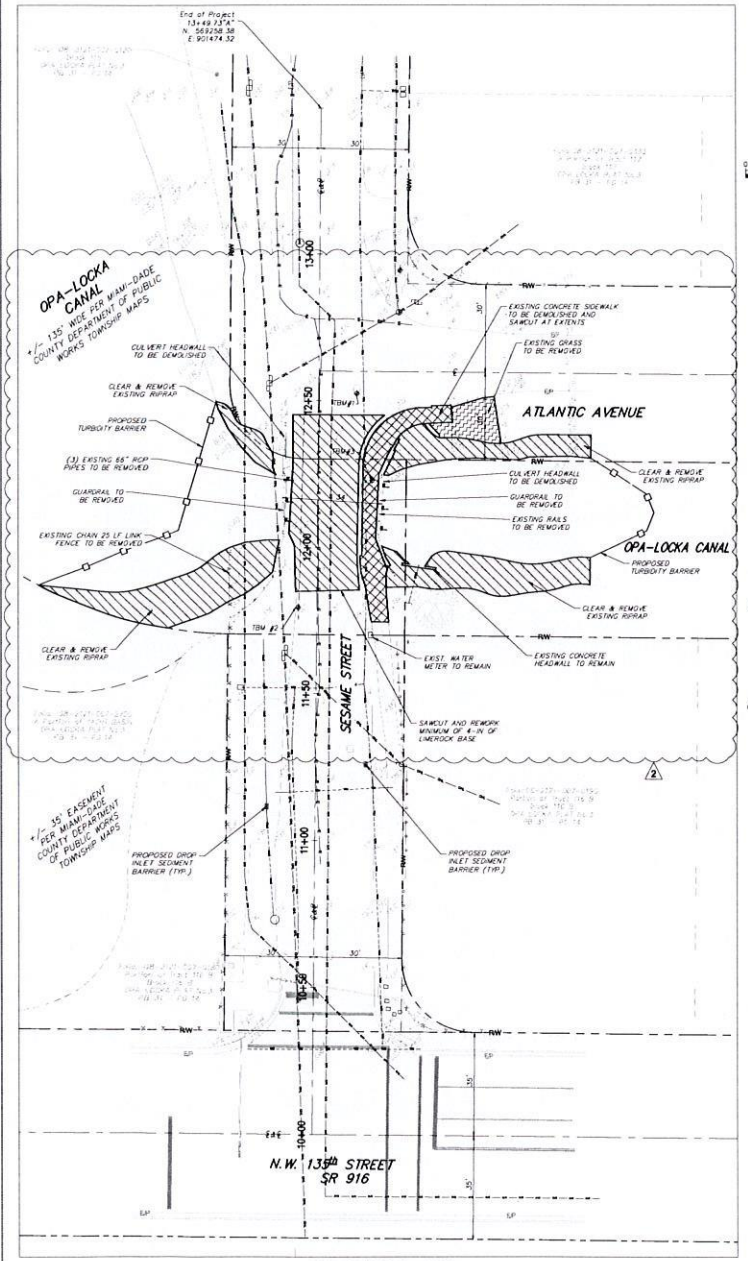
1. ALL SUB-GRADE, LIMEROCK AND ASPHALT TESTS REQUIRED SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER AND PER CITY/COUNTY/STATE REQUIREMENTS.
2. DENSITY TESTS SHALL BE CONDUCTED EVERY 100 FEET AND TWO FEET AWAY FROM ANY MANHOLE OF DRAINAGE STRUCTURE INSTALLED IN PAVED AREAS.

SIGNING AND MARKING

1. ALL PAVEMENT MARKING AND SIGNING SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION, & FDOT.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. CONTRACTOR SHALL PAINT MARKINGS THEN AFTER 14 DAY CURING PERIOD PLACE THERMOPLASTIC PAVEMENT MARKINGS.
3. ONE BI-DIRECTIONAL YELLOW REFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED AT 40' INTERVALS ON EACH SIDE OF DOUBLE YELLOW STRIPES.
4. BI-DIRECTIONAL AMBER/AMBER REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED AT 1' INTERVALS AT ALL BULNOSES.
5. BI-DIRECTIONAL WHITE/RED REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED AT 20' INTERVALS ALONG SOLID WHITE LINES (NOT ON EDGE OF PAVEMENT OR BIKE LANE LINES).
6. REFLECTIVE PAVEMENT MARKERS SHALL BE CLASS B MARKERS MANUFACTURED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
7. ALL SIGNING SHALL BE FABRICATED USING TYPE IX SHEETING, AS PER MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS (CURRENT EDITION).
8. ALL PAVEMENT MARKINGS AND SIGNING DAMAGED DURING CONSTRUCTION, SHALL BE RESTORED TO MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION.
9. EXISTING MARKINGS SHALL BE REMOVED BY WATER BLASTING ONLY.
10. SEE SIGNING AND MARKING DETAILS FOR ADDITIONAL INFORMATION.
11. ALL EXISTING SIGNALIZATION EQUIPMENT TO REMAIN IS ASSUMED TO BE IN GOOD WORKING ORDER UNLESS CITY IS NOTIFIED IN WRITING PRIOR TO START OF CONSTRUCTION. ANY DAMAGES CAUSED TO THE SIGNAL EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

MAINTENANCE OF TRAFFIC

1. TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE PROJECT TRAFFIC PLANS, THE CURRENT EDITION OF THE FDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS MINIMUM CRITERIA.
2. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ALL POTHOLES THAT DEVELOP WITHIN PROJECT LIMITS AND WILL MAINTAIN A SUPPLY OF COLD MIX ON THE PROJECT SITE TO EXPEDITE THESE REPAIRS. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED AS PART OF THE OVERALL BID.
3. REQUEST FOR PROPOSED TRAFFIC CONTROL DEVICES OR TEMPORARY DETOURS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO ROADWAY'S MAINTAINING AGENCY TO CLOSURE OR DETAIL.
4. AT THE DISCRETION OF THE ENGINEER, IF A LANE CLOSURE CAUSES EXTENDED CONGESTION OR DELAY, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN THE CLOSED LANE(S) UNTIL SUCH TIME THAT TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.
5. THE TRAFFIC AND TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIAL ARE AVAILABLE FOR THE CONSTRUCTION IN THAT AREA.
6. THE CONTRACTOR SHALL REMOVE ANY EXISTING OR PROPOSED PAVEMENT MARKINGS THAT CONFLICT WITH



DEMOLITION AND EROSION CONTROL PLAN

SCALE: 1" = 20'

N

HORIZONTAL SCALE

0 20' 40'

1 INCH = 20 FEET



PHOTO 1

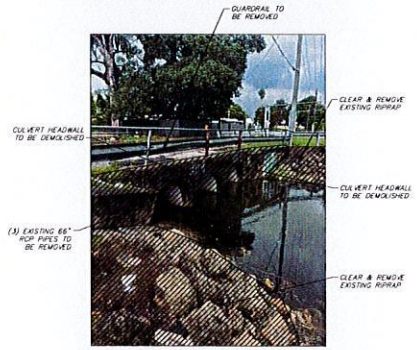
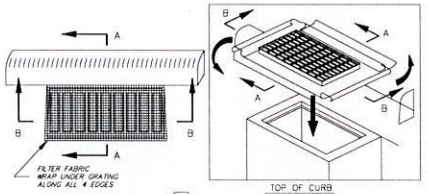


PHOTO 2



PHOTO 3

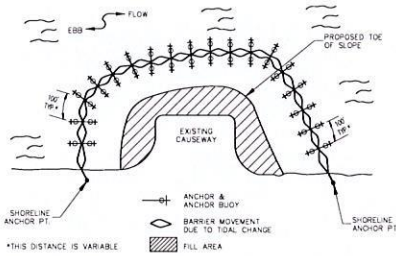


NOTE:

1. CONTRACTOR SHALL PERFORM DAILY INSPECTIONS TO ENSURE GEO-TEXTILE FABRIC IS NOT RIPPED OR BROKEN. CONTRACTOR SHALL INSPECT AFTER RAIN STORM EVENTS.

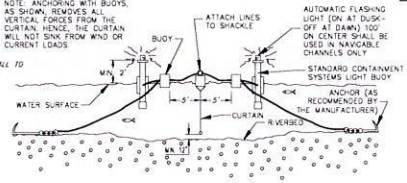
PROPOSED DROP INLET SEDIMENT BARRIER

SCALE: 1" = 20'



TURBIDITY BARRIER LAYOUT PLAN

SCALE: 1" = 20'



TURBIDITY BARRIER SECTION

SCALE: 1" = 20'

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- EXISTING RIP RAP
- EXISTING CONCRETE TO BE REMOVED
- EXISTING CULVERT & RIPRAP TO BE REMOVED
- EXISTING GRASS TO BE REMOVED
- PROPOSED TURBIDITY BARRIER

NOTES

1. ALL AREAS DAMAGED BY CONTRACTOR, INCLUDING BUT NOT LIMITED TO SIDEWALKS PAVEMENT MARKINGS, ASPHALT, AND DRIVEWAYS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.
2. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO PROPOSED IMPROVEMENTS.
3. THE CONTRACTOR SHALL MAINTAIN FLOW WITHIN THE CANAL DURING CONSTRUCTION. THE EXISTING CULVERT PIPES. THE CONSTRUCTION SEQUENCE SHALL BE PERFORMED ORDERLY AS TO MINIMIZE WATERWAY IMPACTS.
4. THE DEMOLISHION WORK WITHIN THE CANAL SHALL TAKE PLACE ONLY AFTER EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND IN WORKING ORDER.
5. ALL EXISTING SIGNS IMPACTED BY CONSTRUCTION SHALL BE PROVIDED, AS NECESSARY, AT CONTRACTORS EXPENSE.
6. ALL EXISTING TREES SHALL BE MAINTAINED AND PROTECTED SO AS TO MINIMIZE IMPACTS. SHOULD TREE RELOCATION/REMOVAL BE REQUIRED, IT SHALL BE COORDINATED BY THE CONTRACTOR TO OBTAIN NECESSARY PERMITS.
7. IF BYPASS PUMPING IS REQUIRED, THE CONTRACTOR IS RESPONSIBLE FOR ITS DESIGN / SELECTION AND SPECIFICATION. BYPASS PUMPING PLAN SHALL BE SUBMITTED TO THE EOR FOR APPROVAL DURING SHOP DRAWINGS REVIEW.
8. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR THE INCLUSIVENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO IDENTIFY, LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT DIGGING) COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY REINALDO RIVERA, PE. ON 9/8/23.

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CITY OF OPA-LOCKA, FLORIDA — INCORPORATED 1926

300

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

DEMOLITION AND EROSION CONTROL PLAN

DRAWING HISTORY

DS	07/14/22 AD
DS	08/18/22 AD
DS	05/09/23 AD

REVISIONS

DERM COMMENTS	05/09/23 AD
DERM COMMENTS	06/15/23 AD
DERM COMMENTS	09/08/23 AD

APPROVALS

DJS	AD
RE	RR

REINALDO J. RIVERA LICENSE No. 83476 STATE OF FLORIDA PROFESSIONAL ENGINEER

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CORAL GABLES, FLORIDA 33134
(305) 753-2605

19-00098

OPA-LOCKA-C-01.DWG

9/8/23 AS SHOWN

SHEET C-01

DRAWING NO. 3 OF 15

A. DEMOLITION NOTES

1. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THIS DEMOLITION PLAN.
2. THE DEMOLITION PLAN IS BASED ON AVAILABLE UTILITY INFORMATION AND MAY OR MAY NOT BE ALL INCLUSIVE. FOR THIS SITE, ANY UTILITIES ENCOUNTERED DURING DEMOLITION THAT ARE NOT DEPICTED/ADDRESSED ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO OBTAIN ALL DEMOLITION PERMITS.
4. ALL FEATURES IDENTIFIED ON THIS PLAN WHICH ARE LISTED TO BE DEMOLISHED ARE TO BE REMOVED FROM THE SITE, AFTER DEMOLITION IS COMPLETE THE SITE SHALL BE DELIVERED IN A CONDITION SUITABLE FOR DEVELOPMENT.
5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
6. CONTRACTOR TO USE CARE IN HANDLING DEBRIS FROM THE SITE TO ENSURE THE SAFETY OF THE PUBLIC. HAUL ROUTE SHALL BE CLOSELY MONITORED FOR DEBRIS OR MATERIALS TRACKED ONTO ADJOINING ROADWAYS, SIDEWALKS, ETC. ROADWAYS AND WALKWAYS TO BE CLEARED DAILY OR AS NECESSARY TO MAINTAIN PUBLIC SAFETY.
7. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO REMAINING IMPROVEMENTS.
8. SEE SITE PLAN FOR LIMITS OF RESURFACED ROADWAY.
9. CONTRACTOR TO MAINTAIN DRAINAGE FLOW FOR CANAL DURING AND AFTER CONSTRUCTION. FURTHERMORE, HE/SHE SHALL COORDINATE TO ENSURE BY-PASS PUMPING RATES ARE ADEQUATE FOR FLOW DIVERSION.
10. SEE EROSION CONTROL PLAN FOR INLET PROTECTION AND EROSION AND SEDIMENTATION CONTROL MEASURES.
11. CONTRACTOR TO MAINTAIN PEDESTRIAN TRAFFIC FLOW DURING REMOVAL/REINSTALLATION OF SIDEWALKS.

B. BEST MANAGEMENT PRACTICES (BMPS)

1. THIS PLAN HAS BEEN PREPARED TO ENSURE COMPLIANCE WITH APPROPRIATE CONDITIONS OF THE MIAMI-DADE COUNTY LAND DEVELOPMENT REGULATIONS, THE RULES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), CHAPTER 17-25, F.A.C., THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), CHAPTER 40D-4, F.A.C. AND THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) DOCUMENT NO EPA 833/R-92-005 (SEPTEMBER 1992). THE PLAN ADDRESSES THE FOLLOWING:

   A. PREVENT LOSS OF SOIL DURING CONSTRUCTION BY STORMWATER RUNOFF AND/OR WIND EROSION, INCLUDING PROTECTING TOPSOIL BY STOCKPILING FOR REUSE.
   B. SEDIMENT CONTROL/PROTECTION OF CANAL.
   C. PREVENT POLLUTING THE AIR WITH DUST AND PARTICULATE MATTER. THE VARIOUS TECHNIQUES OR ACTIONS CONTRIBUTING UNDER THIS SECTION INDICATE THE APPROPRIATE SITUATION WHEN THE TECHNIQUES SHOULD BE EMPLOYED AS IDENTIFIED IN A GENERIC - REFERENCE TO A DIAGRAM OR FIGURE REPRESENTING THE TECHNIQUE. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED (BMPS). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS SPECIFIED IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. CONTRACTOR SHALL PREPARE REQUIRED NPDES DOCUMENTATION AND OBTAIN PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE THE REQUIRED NPDES DOCUMENT AND OBTAIN THE NPDES PERMIT. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE DEEMED INCIDENTAL TO THE PROJECT LUMP SUM COST.

C. GENERAL EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THESE EROSION CONTROL DRAWINGS, THE STANDARD DETAILS, THE NPDES PERMIT (TO BE OBTAINED BY CONTRACTOR) AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THIS DRAWING AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEWATERING PERMITS AS SITE CONDITIONS AND CONSTRUCTION ACTIVITIES REQUIRE.
4. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP) IN ALL CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

   A. FUEL SPILLS AND LEAKS PREVENTION
   B. PREVENT/REDUCE VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
   C. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR
   D. PROPER OUTDOOR LOADING/UNLOADING OF MATERIALS
   E. PREVENT/REDUCE OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND BY-PRODUCTS
   F. SOLID WASTE MANAGEMENT
   G. HAZARDOUS WASTE MANAGEMENT
   H. CONCRETE WASTE MANAGEMENT
   I. SANDBLASTING WASTE MANAGEMENT
   J. STRUCTURE CONSTRUCTION AND PAINTING
   K. SPILL PREVENTION AND CONTROL
   L. CONTAMINATED SOIL MANAGEMENT
   M. SANITARY/SEPTIC WASTE MANAGEMENT
   N. SOIL EROSION CONTROL
   O. STORM WATER TURBIDITY MANAGEMENT

5. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
6. BEST MANAGEMENT PRACTICES (BMPS) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
7. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, CONSTRUCTION MUST MAINTAIN ALL PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS ON SITE AT ALL TIMES.
8. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL AS AS REQUIRED BY THE GENERAL PERMIT.
9. CONTRACTOR SHALL BEGIN CLEARING AND GRUBBING THOSE PORTIONS OF THE SITE NECESSARY TO IMPLEMENT PERIMETER EROSION MEASURES. CLEARING AND GRUBBING FOR THE REMAINING PORTIONS OF THE PROPOSED SITE SHALL COMMENCE ONCE PERIMETER CONTROLS ARE IN PLACE. PERIMETER CONTROLS SHALL BE ACTIVELY MAINTAINED UNTIL SOD AREAS HAVE BEEN STABILIZED AND SHALL BE REMOVED ONCE FINAL STABILIZATION IS COMPLETE.
10. GENERAL EROSION CONTROL BMPS SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND POTENTIAL CANAL EMBANKMENT CAVE-INS WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION.
11. ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
12. SURFACE WATER QUALITY SHALL BE MAINTAINED BY EMPLOYING THE FOLLOWING BMP'S IN THE CONSTRUCTION PLANNING AND CONSTRUCTION OF ALL IMPROVEMENTS.
13. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED (BMPS'S). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS NECESSARY TO CONFORM TO CURRENT CITY, FDEP AND SFWMD CODES AND SPECIFICATIONS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION ACTIVITIES.

D. STORM WATER EROSION CONTROL PRACTICES

1. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT FROM DETENTION PONDS AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
2. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
3. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (COMPOST SOCK DEVICES, ETC.) TO PREVENT EROSION.
4. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES.
5. EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITIES. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:
   A. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE EARLIEST PRACTICAL STAGE POSSIBLE.
   B. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SODDING AROUND INLETS IS COMPLETE.
   C. WHEN NEEDED A TEMPORARY SEDIMENT TRAP SHALL BE CONSTRUCTED TO OBTAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS.
6. SILT BARRIERS, ANY SILT WHICH ACCUMULATES BEHIND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED PROMPTLY AFTER THE END OF THE MAINTENANCE PERIOD SPECIFIED FOR THE BARRIERS.
7. SLOPES OF BANKS OF RETENTION/DETENTION PONDS SHALL BE CONSTRUCTED NOT STEEPER THAN 3H:1V FROM TOP OF BANK TO TEN FEET BELOW NORMAL WATER LEVEL AS APPLICABLE.
8. SOD SHALL BE PLACED FOR A 2-FOOT WIDE STRIP ADJOINING ALL CURBING AND AROUND ALL INLETS. SOD SHALL BE PLACED BEFORE SILT BARRIERS ARE REMOVED.
9. WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR SWALE, A TEMPORARY SEDIMENT TEMP SHALL BE CONSTRUCTED.
10. FILTER FABRIC SHALL BE USED FOR STORM DRAIN INLET PROTECTION BEFORE FINAL STABILIZATION.
11. FLOATING TURBIDITY BARRIERS SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL INCLUDE EXECTION OF DRAINAGE OUTFALL PIPE AND ENDWALL.
12. EXISTING DRAINAGE FLOW PATTERNS AND POSITIVE DRAINAGE TO EXISTING OUTFALLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
13. ALL NEW INLETS INSTALLED UNDER THIS PROJECT SHALL RECEIVE IN LET PROTECTION.

E. WIND EROSION CONTROL PRACTICES

1. WIND EROSION SHALL BE CONTROLLED BY EMPLOYING THE FOLLOWING METHODS AS NECESSARY AND APPROPRIATE:
   A. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.
   B. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HASPERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED (SEE PERMANENT STABILIZATION PRACTICES FOR DETAILS). THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN. CLEARED SITE DEVELOPMENT AREAS SHALL BE CONTINUALLY SCHEDULED FOR CONSTRUCTION ACTIVITIES SHALL BE COVERED WITH HAY OR DAMPSEEDED AND PERIODICALLY WATERED SUFFICIENTLY TO STABILIZE THE TEMPORARY EROSION (SEE ITEM TEMPORARY STABALIZATION PRACTICES FOR DETAILS).
   C. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR APPLICATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS SHOULD INCLUDE ERECTION OF DUST CONTROL FENCES A 6-FT GEOTEXTILE FILTER FIBER SHOULD BE HANGING AGAINST THE EXISTING CHAIN LINK FENCE AND GATE.
2. ALL DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

F. STABILIZATION PRACTICES

1. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO 62-621.300(4)(A).
2. DISTURBED PORTIONS OF SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASE FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA.
3. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY PERMANENTLY CEASE SHALL BE STABILIZED WITH SOD NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

G. STRUCTURAL PRACTICES

1. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO 62-621.300(4)(A).

H. WASTE DISPOSAL

1. WASTE MATERIALS -- ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.
2. HAZARDOUS WASTE -- HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.
3. SANITARY WASTE -- SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.
4. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

I. OFFSITE TRACKING

1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE MAJOR ROAD CONNECTED TO THE PROJECT SHALL BE CLEANED ONCE A DAY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK RESULTING FROM CONSTRUCTION TRAFFIC. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.
2. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATION PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BERMED DIKES, HAY BALES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN, SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OF OIL, GREASE OR LUBRICANTS. CONTRACTORS SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS AS SOON AS POSSIBLE AFTER OCCURRENCE.
3. ALL WASH WATER FROM CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC. SHALL BE DETAINED ON SITE AND SHALL BE PROPERLY TREATED OR DISPOSED.
4. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
5. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

J. MAINTENANCE

1. ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS, AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

   A. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
   B. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
   C. THE COMPOST ROCK FILTRATION DEVICE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF DEVICE. COMPOST SOCK SHALL BE REPAIRED TO ITS ORIGINAL CONDITION IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE COMPOST SOCK WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE COMPOST SOCK.
   D. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
   E. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
   F. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. THE SEDIMENT BASINS/SWALES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 10% AND AFTER CONSTRUCTION IS COMPLETE.
   G. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION. EROSION DIKES SHALL BE INSPECTED MONTHLY AND BREACHES SHALL BE PROMPTLY REPAIRED.
   H. A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.
   I. ALL REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.
   J. THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.
   K. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.

2. THE EROSION CONTROL FEATURES INSTALLED BY THE CONTRACTOR SHALL BE ACCEPTABLY MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.

G. SPILL PREVENTION AND CONTROL

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

1. GOOD HOUSEKEEPING

   A. SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.
   B. STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.
   C. ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.
   D. ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.
   E. PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER. 1. ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
   F. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

2. HAZARDOUS PRODUCTS

   A. MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.
   B. PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

3. PRODUCT SPECIFIC PRACTICES

   A. PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELLED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.
   B. THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND NEED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
   C. PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.
   D. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   E. CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

H. SPILL CLEAN UP

1. IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED ABOVE, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
   A. SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.
   B. THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: SLICKERS, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.
   C. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON-SITE AND READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
   D. ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.
   E. WHEN CLEANING A SPILL, THE AREA SHOULD BE well VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.
   F. TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.
   G. AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.
   H. THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

I. SEQUENCE OF CONSTRUCTION

1. UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS, TRAILER, PARKING, LAY-DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

   A. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, AND INSTALL INLET PROTECTION, TURBIDITY BARRIERS, AND SILT FENCE.
   B. DEMOLISH EXISTING STRUCTURES, (IF APPLICABLE).
   C. INSTALL AND STABILIZE ANY NECESSARY HYDRAULIC CONTROL STRUCTURES (DIKES, CHECK DAMS, OUTLET TRAPS, ETC.).
   D. PREPARE CLEARING AND GRUBBING OF THE SITE, (IF APPLICABLE).
   E. PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
   F. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY GENERIC PERMIT.

2. IN THE EVENT OF BMP ISSUES, HALT ALL ACTIVITIES AND CONTACT THE CIVIL ENGINEER CONSULTANT TO PERFORM INSPECTION AND CERTIFICATION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH ENGINEER AND ALL GROUND DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

3. CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS NECESSARY FOR CONSTRUCTION.

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CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

300

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

DEMOLITION AND EROSION CONTROL
NOTES AND DETAILS

DRAWING HISTORY

DESIGN	DS 07/14/22 AD
DRAWN	DS 09/16/22 AD
CHECKED	DS 09/09/23 AD

REVISIONS

1 DEPM COMMENTS	05/09/23 AD
2 DEPM COMMENTS	06/15/23 AD
3 DEPM COMMENTS	09/08/23 AD

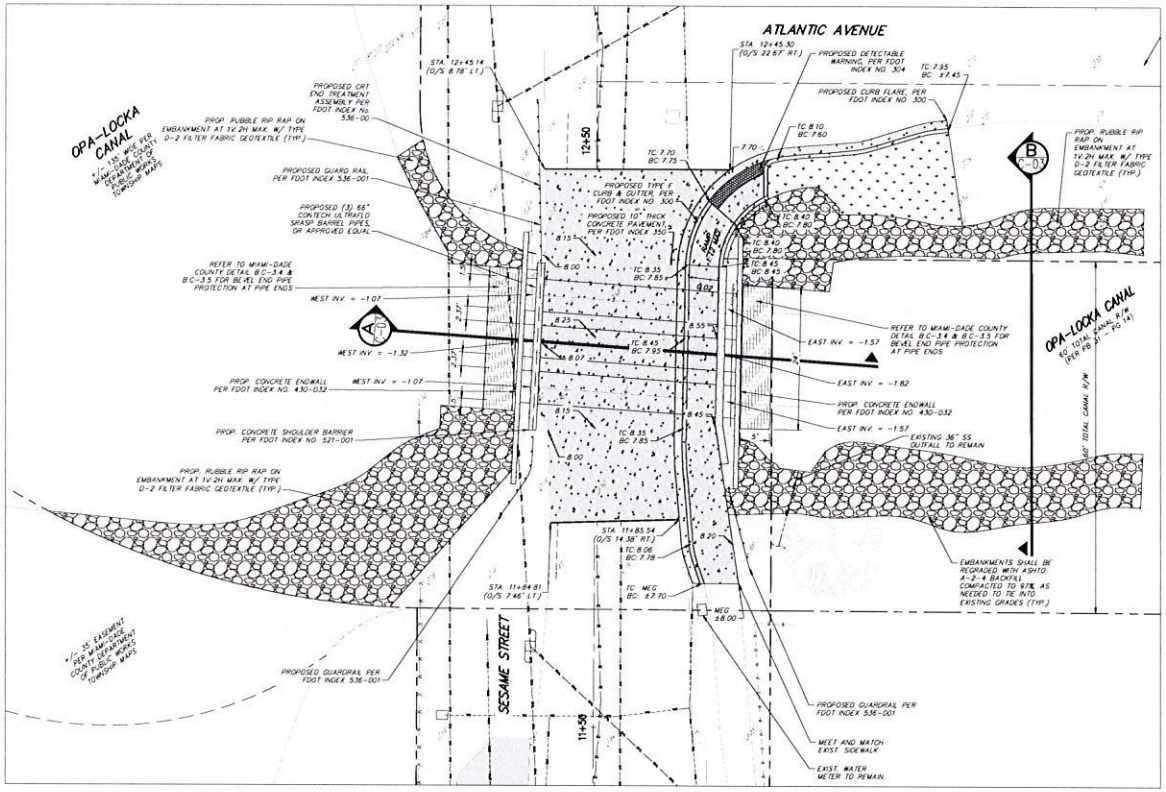
APPROVALS

DESIGNED	DJS AD
DRAWN	RE RR
CHECKED	
APPROVED	

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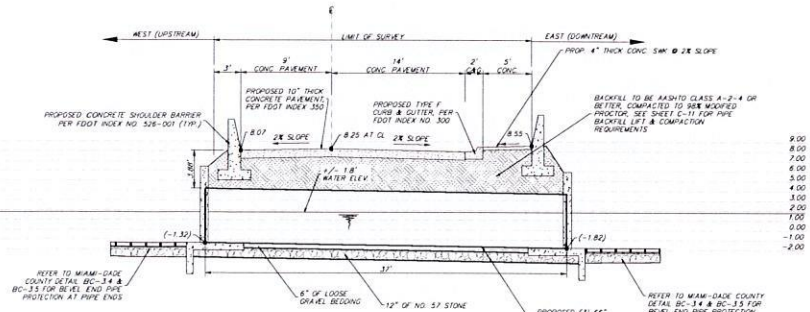
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PROJECT NO.	19-00098
FILE NAME	OPA-LOCKA-C-01.DWG
DATE	9/8/23
SCALE	AS SHOWN
SHEET	C-02
DRAWING NO



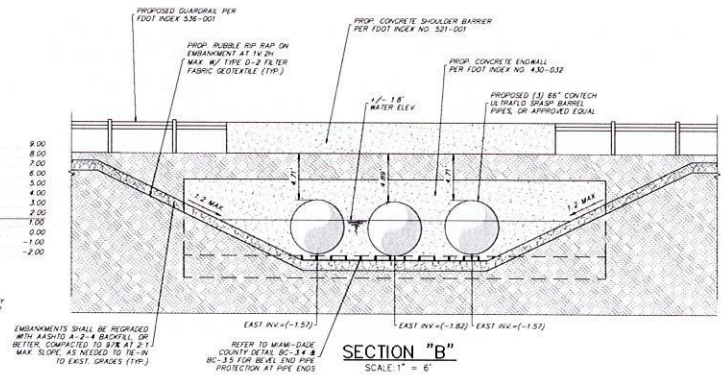
PROPOSED SITE PLAN

SCALE: 1" = 10'



SECTION "A"
CENTER CULVERT PIPE

SCALE: 1" = 6'



SECTION "B"

SCALE: 1" = 6'

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED RIP RAP
- PROPOSED CONCRETE
- PROPOSED DETECTABLE WARNING
- PROPOSED SOD
- PROPOSED SAND CEMENT RIP RAP
- PROPOSED CHAIN LINK FENCE
- PROPOSED GUARD RAIL
- TOP OF CURB/BOTTOM OF CURB
- PROPOSED SPOT ELEVATION

NOTES

1. CONTRACTOR TO MAINTAIN DRAINAGE FLOW WITHIN THE CANAL DURING AND AFTER CONSTRUCTION.
2. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST FLAG JOINTS.
3. ALL SIDEWALKS SHALL BE 4" THICK, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK.
4. NO EXISTING TREES SHALL BE REMOVED UNLESS OTHERWISE STATED.
5. ALL PROPOSED SIDEWALK SLOPES SHALL HAVE A 2% CROSS SLOPE AND 5% LONGITUDINAL SLOPE, MAXIMUM.
6. ALL SIDEWALK RAMPS AND DETECTABLE WARNINGS SHALL CONFORM TO FDOT STANDARDS.
7. ALL ASPHALT TO BE REMOVED SHALL BE SAW TO ADJACENT TO PROPOSED IMPROVEMENTS.
8. ALL UTILITIES CROSSINGS THROUGH THE CULVERT ARE ASSUMED TO BE PASSING UNDERNEATH. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONFIRM, IDENTIFY, PRESERVE, AND MAINTAIN THEIR INTEGRITY WHILE PERFORMING CONSTRUCTION.
9. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR THE INCLUSIVENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO IDENTIFY, LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT DIGGING) COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK.

* ALL GRADES ON PLANS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD-1929)

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S.S.O.C.O.F. DESIGN TICKET No.342105404-000

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

300 ENGINEERING GROUP
2222 Ponce de Leon Blvd. Suite 300
Coral Gables, Fla. 33134

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PROPOSED SITE & GRADING PLAN

DRAWING HISTORY

DS	07/14/22	AD
DS	09/16/22	AD
DS	05/09/23	AD

REVISIONS

1 DERM COMMENTS	05/09/23	AD
2 DERM COMMENTS	06/15/23	AD
3 DERM COMMENTS	09/08/23	AD

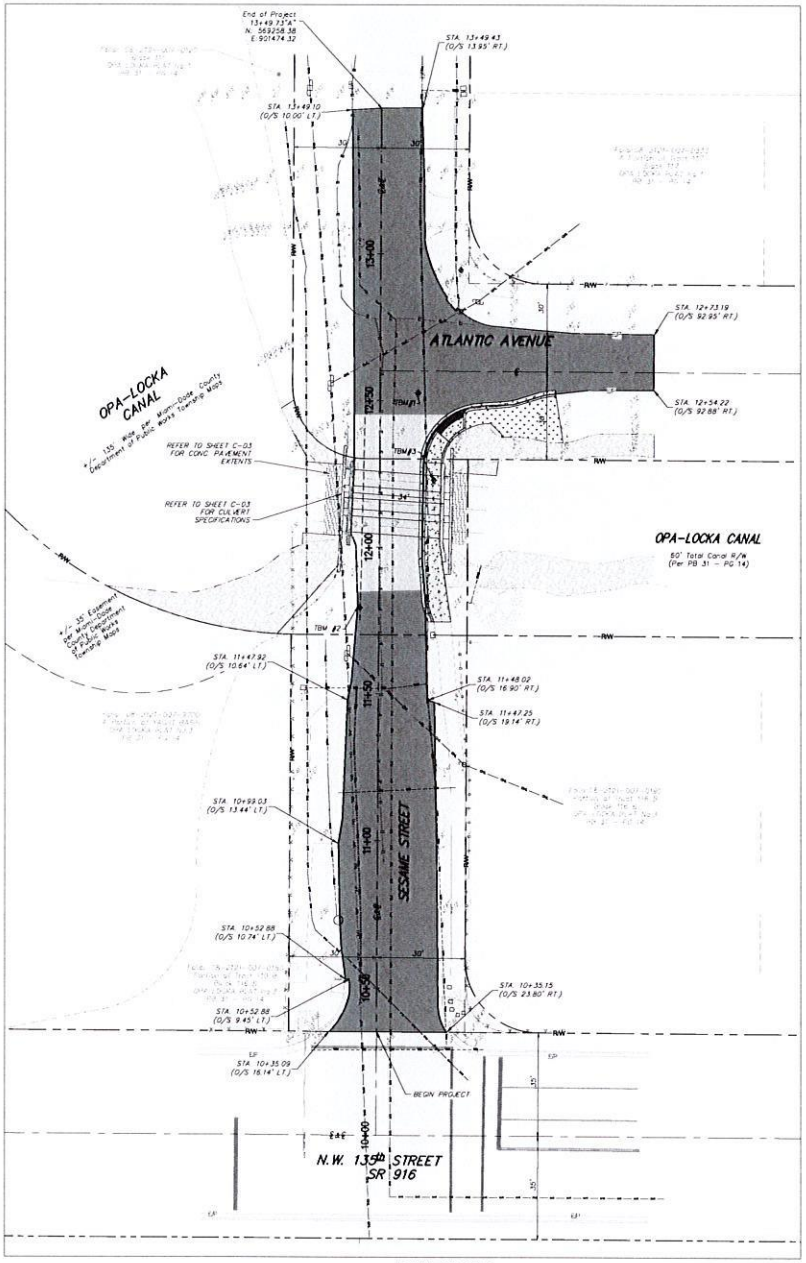
APPROVALS

DES.	DS	AD
DR.	RE	RR

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JOB NO.	19-00098
FILE NO.	OPA-LOCKA-C-03.DWG
DATE	9/8/23
SCALE	AS SHOWN
SHEET	C-03
DRAWING NO.	5 OF 15



PAVEMENT
RESTORATION PLAN
SCALE: 1" = 20'

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED SOD
- PROPOSED RIP RAP
- PAVEMENT RESTORATION TYPE V (UNINC. MIAMI-DADE) (8,177 Sq.Ft. ASPHALTIC CONCRETE - TYPE I MX, NOMINAL 1" THICK)

NOTES

1. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST FLAG JOINTS.
2. ALL SIDEWALKS SHALL BE 4" THICK, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK.
3. NO EXISTING TREES SHALL BE REMOVED UNLESS OTHERWISE STATED.
4. ALL PROPOSED SIDEWALK SLOPES SHALL HAVE A 2% CROSS SLOPE AND 5% LONGITUDINAL SLOPE, MAXIMUM.
5. ALL SIDEWALK RAMPS AND DETECTABLE WARNINGS SHALL CONFORM TO FDOT STANDARDS.
6. ALL ASPHALT TO BE REMOVED SHALL BE SAW TO ADJACENT TO PROPOSED IMPROVEMENTS.
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CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PAVEMENT RESTORATION PLAN

DRAWING HISTORY

	DS	07/14/22 AD
	DS	09/18/23 AD
	DS	08/09/23 AD

REVISIONS

1	DERM COMMENTS	05/09/23 AD
2	DERM COMMENTS	06/15/23 AD
3	DERM COMMENTS	09/08/23 AD

APPROVALS

DJS	AD
RE	RR

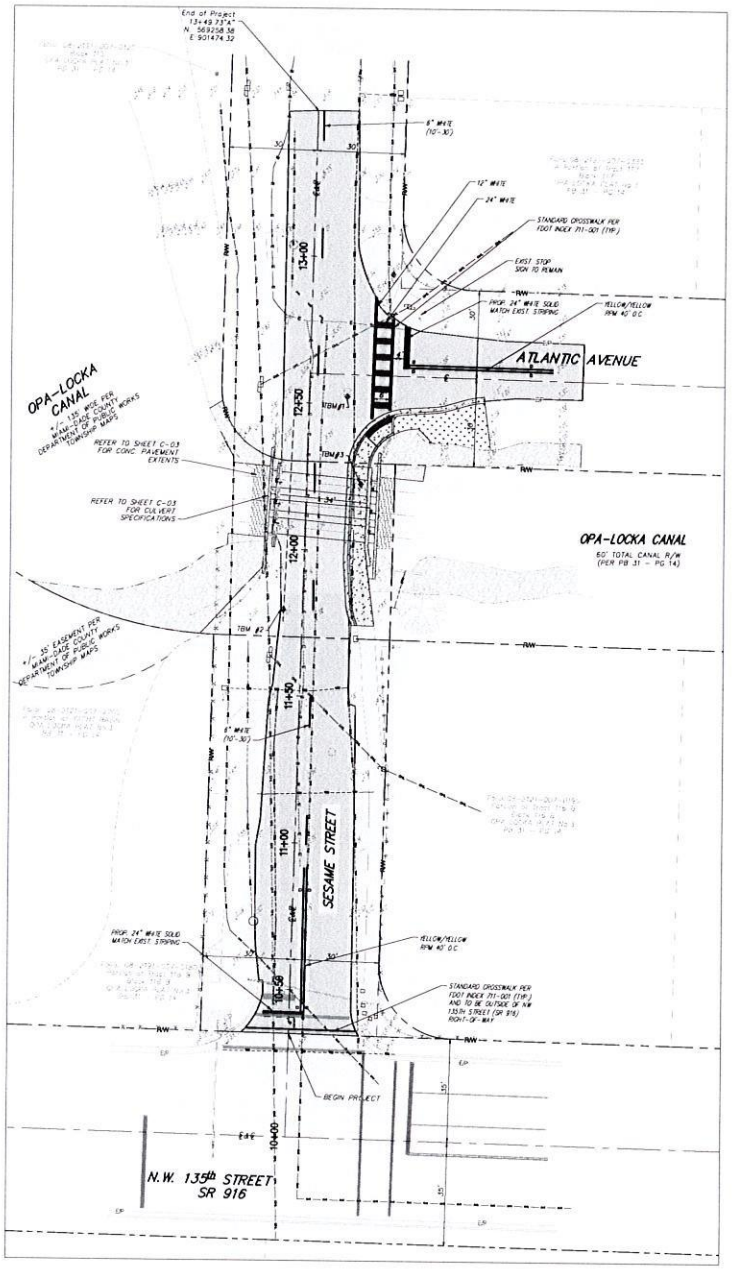
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	19-00098
	OPA-LOCKA-C-04.DWG
9/8/23	AS SHOWN

SHEET C-04

DRAWING NO. 6 OF 15



PROPOSED P&S PLAN

SCALE: 1:20

N

HORIZONTAL SCALE
0 20' 40'
1 INCH = 20 FEET

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED RIP RAP
- PAVEMENT RESTORATION

NOTES

1. ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND MIAMI-DADE TRAFFIC ENGINEERING STANDARDS.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PAINT MARKINGS, THEN AFTER 14 DAY CURING PERIOD, PLACE THERMOPLASTIC PAVEMENT MARKINGS.
3. ONE BI-DIRECTIONAL YELLOW REFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED AT 40-FEET INTERVALS ON EACH SIDE OF DOUBLE YELLOW STRIPES AND AT 40-FEET INTERVALS WITHIN SKIP CENTERLINE MARKINGS.
4. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR THE INCLUSIVENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO IDENTIFY, LOCATE AND MARK EXISTING UTILITIES BY FIELD VERIFICATION, (E.G. SOFT DIGGING), COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK.

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CITY OF OPA-LOCKA, FLORIDA — INCORPORATED 1926

300 ENGINEERING

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PAVEMENT MARKING AND SIGNAGE

DRAWING HISTORY

DS	07/14/22	AD
DS	09/16/22	AD
DS	05/09/23	AD

REVISIONS

1	DERM COMMENTS	05/09/23 AD
2	DERM COMMENTS	06/15/23 AD
3	DERM COMMENTS	09/08/23 AD

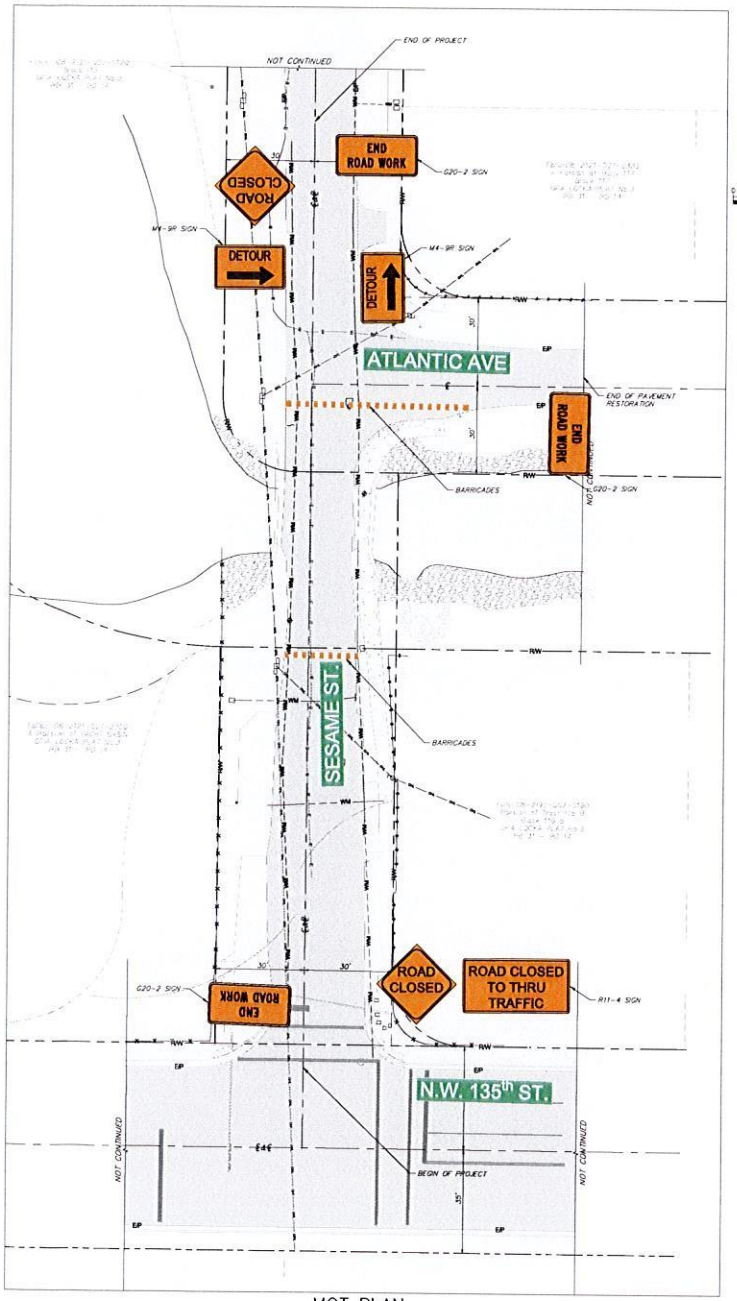
APPROVALS

DJS	AD
RE	RR

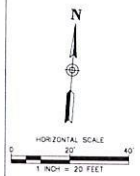
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JOB NO.	19-00098
DRAWING NO.	OPA-LOCKA-C-05.DWG
DATE	9/8/23
SCALE	AS SHOWN
SHEET	C-05
DRAWING NO.	7 OF 15



MOT PLAN
SCALE: 1" = 20'



LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- EXISTING RIP RAP

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S.S.O.C.O.F. DESIGN TICKET No.342105404-000

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

300

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

MOT PLAN

DRAWING HISTORY

DS	07/14/22	AD
DS	09/16/22	AD
DS	05/09/23	AD

REVISIONS

⚠ DERM COMMENTS	05/09/23	AD
⚠ DERM COMMENTS	06/15/23	AD
⚠ DERM COMMENTS	09/08/23	AD

APPROVALS

DJS	AD
RE	RR

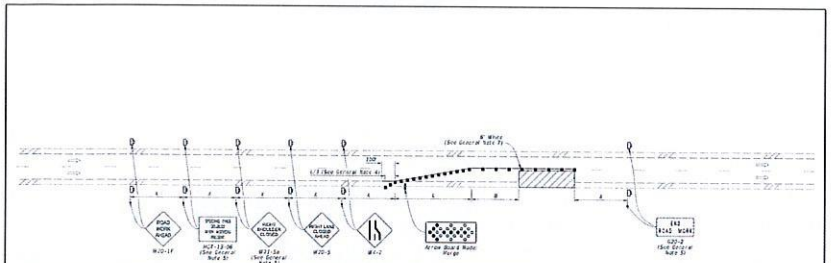
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	19-00098
	OPA-LOCKA-C-06.DWG
9/8/23	AS SHOWN

SHEET
C-06

DRAWING NO.
8 OF 15



SINGLE LANE CLOSURE

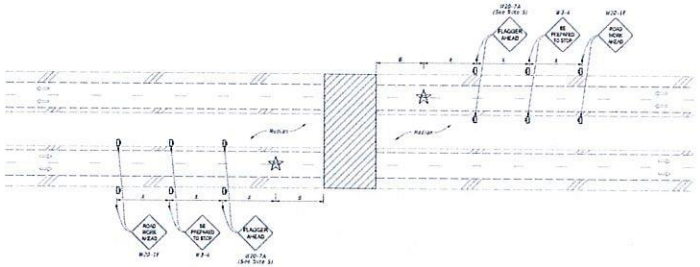
SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Arrow Board
- Lane Identification and Direction of Traffic

GENERAL NOTE:

1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", and channelizing device spacing values.
2. On undivided highways the median signs as shown are to be omitted.
3. On limited access facilities, omit "Right Shoulder Closed" signs (W21-5a) and associated work zone sign spacing distances.
4. If the grass shoulder is less than 4 m width, omit the taper and channelizing devices from the grass shoulder.
5. The "Speeding Fines Doubled When Workers Present" signs (R2S-2A) and "End Road Work" signs (G20-2) and "Right Shoulder Closed" (W21-5a), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less. For Single Lane Closures, arrow boards and buffer (B) may also be omitted when the work operation will be in place for 60 minutes or less and the speed limit is 45 mph or less.
6. Use inverted plan of the illustrations for work on left side of roadways.
7. Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.

LAST REVISION 11/01/21	DESCRIPTION	FDOT	FY 2022-23 STANDARD PLANS	MULTILANE ROADWAY, LANE CLOSURES	INDEX 102-613	SHEET 1 of 5



(Multilane Roadway Shown, Two-Lane Roadway Similar)

SYMBOLS:

- Work Area
- Work Zone Sign
- Traffic Control Officer
- Lane Identification and Direction of Traffic

NOTES:

1. This Index applies to two-lane, two-way and multilane roadways, except limited access facilities with temporary daytime roadway closures of 3 hours or less.
2. B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "B" and "X" values.
3. For Two-Lane Roadways, a Flagger may substitute the traffic control officer with approval of the Engineer.
4. Traffic volume or complexity of the roadway may dictate additional signs, devices or traffic control officers.
5. Optionally, use "Flagger Ahead" sign with symbol (W20-7) instead of "Flagger Ahead" sign ● (W20-7A).
6. Dual Signs are required for Dotted Roadways only.

LAST REVISION 11/01/20	DESCRIPTION	FDOT	FY 2022-23 STANDARD PLANS	TEMPORARY ROADWAY CLOSURE	INDEX 102-625	SHEET 1 of 1

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BID SET

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

300 ENGINEERING GROUP
2222 Ponce de Leon Blvd.
Suite 300
Coral Gables, Fla. 33134

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

MAINTENANCE OF TRAFFIC DETAILS

DRAWING HISTORY

	DS	07/14/22 AD
	DS	09/18/22 AD
	DS	05/09/23 AD

REVISIONS

1	DEPM COMMENTS	05/09/23 AD
2	DEPM COMMENTS	06/15/23 AD
3	DEPM COMMENTS	09/08/23 AD

APPROVALS

DES	DJS	CHK	AD
PM	RE	QC	RR

REINALDO J. RIVERA
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No. 83476
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PROFESSIONAL ENGINEER

Reinaldo J. Rivera, P.E.
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CORAL GABLES, FLORIDA 33134
(305) 753-2605

PROJECT NO.	19-00098
FILE NAME	OPA-LOCKA-C-07.DWG
DATE	9/8/23
SCALE	AS SHOWN
SHEET	C-07
DRAWING NO.	9 OF 15

BID SET

C-08

10 OF 15

STANDARD DETAILS

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

DRAWING HISTORY

	DS	07/14/22	AO
	DS	09/16/22	AO
	DS	05/09/23	AO

REVISIONS

4	DSIM COMMENTS	09/09/23	AO
3	DSIM COMMENTS	06/15/23	AO
2	DSIM COMMENTS	09/06/23	AO

APPROVALS

DES		AO
DET		BB
CHK		RE

9/8/23 | AS SHOWN

DN-100KA-C-08.DWG

19-00098

Behnisch, Bivens, P.E.
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REGISTERED
LICENSE
No. 83476
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

303

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1946

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SIDEWALK JOINTS

N.T.S.

LONGITUDINAL SECTION

SAWED JOINTS

OPEN JOINTS

GUARDRAIL HEIGHT SUMMARY TABLE:

Type	Min. Depth 'D'	Mounting Height 'H'	Post Length 'L'
'D' Beam	3'-11"	2'-7"	6'-0"
(Height and Depth Varies)			

GUARDRAIL SECTION
SHOULDERS

N.T.S.

UNPAVED OR PARTIALLY PAVED SHOULDER

GUARDRAIL SECTION
CURB & GUTTER

N.T.S.

BEHIND CURB
(TYPE F Curb Shown)

GUARDRAIL
SECTION

N.T.S.

GUARDRAIL TYPE - MOUNTING HEIGHTS & POST DEPTHS

N.T.S.

W-BEAM

DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS

N.T.S.

PLAN VIEW

ISOMETRIC VIEW

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT

N.T.S.

CURB & GUTTER TYPES E & F

N.T.S.

PROFILE
FLARED END

PROFILE
STRAIGHT END

PLAN

PLAN

CURB & GUTTER

N.T.S.

TYPE F

SIDEWALK WITHOUT UTILITY STRIP

N.T.S.

PLAN

SECTION B-B

RAILING DETAIL

BID SET

11 OF 15

C-09

STANDARD DETAILS

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

DRAWING HISTORY

REVISIONS		
05	09/23/22	AO
05	09/16/22	AO
05	07/14/22	AO

APPROVALS	
DESIGN COMMENTS	09/08/23 AO
DESIGN COMMENTS	06/13/23 AO
DESIGN COMMENTS	05/09/23 AO

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RENALDO J. RIVERA
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No. 63478
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PROFESSIONAL ENGINEER

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

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C-10
12 OF 15
9/12/23
AS SHOWN
DP4-100X4-C-09.DWG
19-00098
Reinaldo J. Rivera, P.E.
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REINALDO J. RIVERA
LICENSE
No. 83476
STATE OF
PROFESSIONAL ENGINEER
DES
DR
CK
QC
APPROVALS
DESIGN COMMENTS 09/06/23 AD
DESIGN COMMENTS 06/15/23 AD
DESIGN COMMENTS 05/09/23 AD
REVISIONS
05 09/06/23 AD
04 09/19/23 AD
03 07/14/23 AD
DRAWING HISTORY
STANDARD DETAILS
OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES
303
CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

CONCRETE PAVEMENT JOINTS
INDEX 350-001
SHEET 3 of 4
FDOT FY 2022-23 STANDARD PLANS
LAST REVISION 11/01/17
DESCRIPTION
NOTES
JOINT ARRANGEMENT
JOINT LAYOUT AT THRU INTERSECTION
JOINT LAYOUT AT 'T' INTERSECTIONS
EXPANSION ASSEMBLY
SECTION DD
TOP VIEW
SECTION CC
CONTRACTION ASSEMBLY
SECTION BB
TOP VIEW
SECTION AA
STEEL HOOK BOLT ASSEMBLY
ALTERNATE KEYWAY AND HOOK BOLT

CONCRETE PAVEMENT JOINTS
INDEX 350-001
SHEET 2 of 4
FDOT FY 2022-23 STANDARD PLANS
LAST REVISION 11/01/17
DESCRIPTION
JOINT SEAL DIMENSIONS
CONCRETE-ASPHALT SHOULDER JOINTS
BACKER ROD BOND BREAKER
TAPE BOND BREAKER
BACKER ROD BOND BREAKER (CONCRETE JOINTS)
CONCRETE-CONCRETE JOINTS
TAPE BOND BREAKER
PREFORMED ELASTOMERIC COMPRESSION SEAL
BACKER ROD BOND BREAKER

CONCRETE PAVEMENT JOINTS
INDEX 350-001
SHEET 1 of 4
FDOT FY 2022-23 STANDARD PLANS
LAST REVISION 11/01/18
DESCRIPTION
DOWEL BARS CAPS
DOWEL BAR LAYOUT
RELATION OF TIE BARS TO DOWEL BARS
DOWEL BARS (LENGTH 18")
LONGITUDINAL JOINTS
TRANSVERSE JOINTS
LANE-TIE JOINT (See Note 2)
BUTT CONSTRUCTION JOINT
CONTRACTION JOINT (Sawed Method)
CONTRACTION JOINT (Side Cleat Method)
EXPANSION JOINT (See Note 6)
BUTT CONSTRUCTION JOINT (Used At Discontinuance Of Work)
NOTES:

BID SET

S.S.O.C.O.F. DESIGN TICKET No. 3421054O4-000

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Digitally signed by Oscar J Cruz
DN: c=US, o=Civtrek Engineering Inc., ou=Main, cn=Oscar J Cruz, dnQualifier=A01410D000001858566602800107G
Date: 2023.09.08 17:37:00 -04'00'

NOTES

1. PROPOSED CULVERT PIPE SHALL BE ADEQUATE FOR AASHTO HS-20 LIVE LOAD UNDER A 2' DEPTH OF FILL
2. CONSTRUCTION SHALL INSTALL CULVERT PER MANUFACTURERS RECOMMENDATIONS
3. CONTRACTOR SHALL PROVIDE PIPE CULVERT SHOP DRAWINGS FOR APPROVAL BY THE EOR PRIOR TO INSTALLATION

LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- EXISTING SANITARY SEWER PIPE
- EXISTING FORCE MAIN PIPE
- EXISTING WATER MAIN PIPE
- EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARDRAIL
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- EXISTING RIP RAP
- PROPOSED RUBBLE RIP-RAP
- PROPOSED CONCRETE
- PROPOSED SAND-CLEMENT RIP-RAP
- PROPOSED GUARD RAIL

N

EXISTING SITE PLAN

SCALE: 1-1/2" = 1'-0"

PROPOSED SITE PLAN

SCALE: 1-1/2" = 1'-0"

OPA-LOCKA CANAL

RW

DRAWING HISTORY

01	01/14/22	DC
02	09/16/22	DC
03	11/10/22	DC

REVISIONS

DESIGN COMMENTS	05/09/23	DC
DESIGN COMMENTS	06/16/23	DC

APPROVALS

PE		DC

OSCAR J. CRUZ
No. 63889
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Oscar J. Cruz, P.E.
Civil Engineer
16650 SW 88th STREET, SUITE 203
MIAMI, FLORIDA, 33196
(305) 432-6826

STATE OF FLORIDA - LICENSE NO. 63889

06/15/2023 | AS SHOWN

DRAWING No. S-01

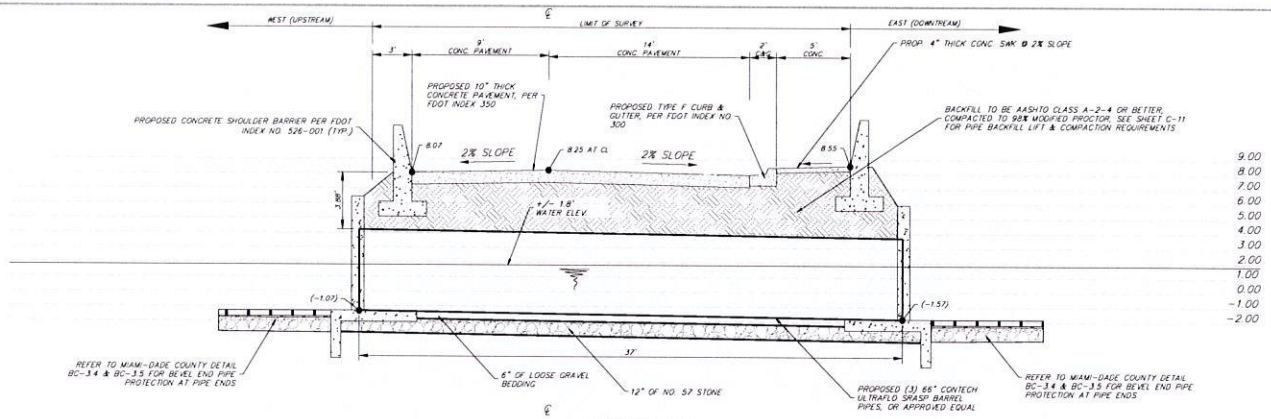
14 OF 15

CIVTREK ENGINEERING, INC.

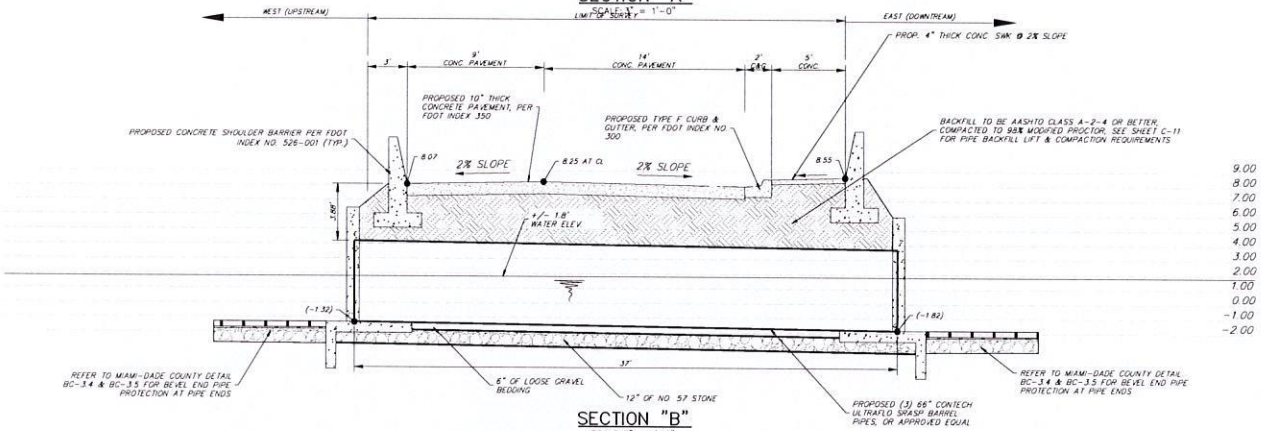
CITY OF OPA-LOCKA, FLORIDA

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

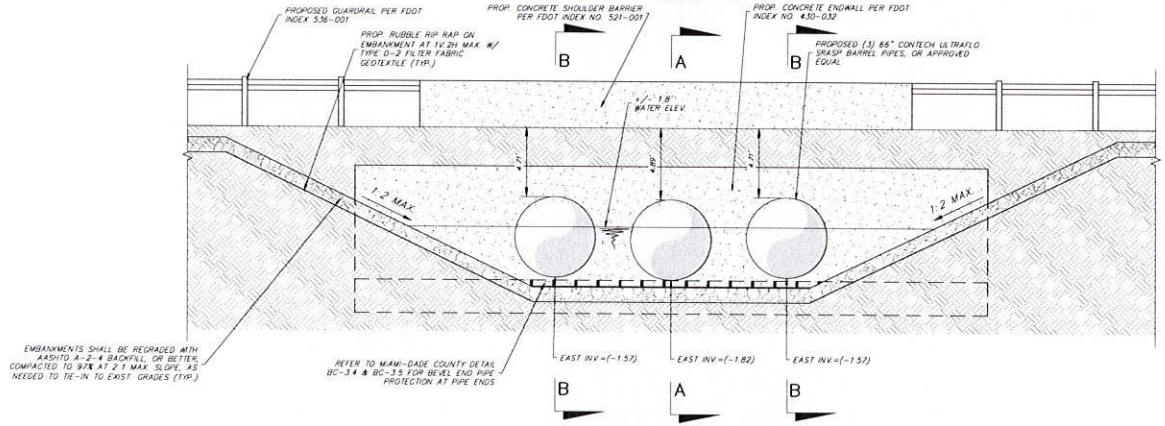
PIPE CULVERT STRUCTURAL DETAILS (1 OF 2)



SECTION "A"
SCALE: 3" = 1'-0"



SECTION "B"
SCALE: 3" = 1'-0"



PROPOSED ELEVATION
SCALE: 3" = 1'-0"

NOTES

1. PROPOSED CULVERT PIPE SHALL BE ADEQUATE FOR AASHTO HS-20 LIVE LOAD UNDER A 2' DEPTH OF FILL.
2. CONTRACTOR SHALL INSTALL CULVERT PER MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR SHALL PROVIDE PIPE CULVERT SHOP DRAWINGS FOR APPROVAL BY THE EOR PRIOR TO INSTALLATION.

Digitally signed by Oscar J Cruz
DN: c=US, o=Chrome Engineering Inc., dnQualifier=A01410D0000018858E66D280010D7CF, cn=Oscar J Cruz
Date: 2023.09.08 17:37:25 -04'00'

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BID SET

CITY OF OPA-LOCKA, FLORIDA
INCORPORATED 1926

CHROME ENGINEERING, INC.

OPA LOCKA CULVERT REPLACEMENT
ENGINEERING DESIGN SERVICES

PIPE CULVERT STRUCTURAL DETAILS (2 OF 2)

DRAWING HISTORY

DS	07/14/22	OC
DS	09/16/22	OC
DS	11/10/22	OC

REVISIONS

1 DEPW COMMENTS	05/09/23	OC
2 DEPW COMMENTS	06/16/23	OC

APPROVALS

OC	OC
FC	OC

OSCAR J. CRUZ No 63689 STATE OF FLORIDA PROFESSIONAL ENGINEER

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(305) 432-6826

19-00098	
OPA-LOCKA-S-01.DWG	
08/18/2023	AS SHOWN

S-SET: S-02

DRAWING NO.: 15 OF 15

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GENERAL CONDITIONS (4 PAGES)

SPECIAL CONDITIONS (4 PAGES)

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01700 PROJECT CLOSEOUT

01710 CLEANING

01711 FINAL ACCEPTANCE

01720 PROJECT RECORD DOCUMENTS

01725 AS-BUILT DRAWINGS

01730 OPERATING AND MAINTENANCE INSTRUCTIONS

01740 PERMITS

01750 MAINTENANCE OF TRAFFIC AND PUBLIC STREETS

DIVISION 2 – SITE WORK

02210 SITE GRADING

02220 EXCAVATION – GENERAL

02230 CLEARING AND GRUBBING

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02510 ASPHALTIC CONCRETE PAVEMENT

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02630 OUTFALL ENDWALL

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02765 PAVEMENT MARKINGS AND TRAFFIC SIGNS

02840 CONCRETE BARRIER

02900 LANDSCAPING

DIVISION 3 – CONCRETE

03300 CAST-IN-PLACE CONCRETE, REINFORCING AND FORMWORK

03360 GROUT

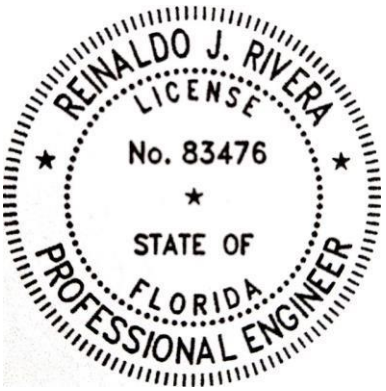
03400 PRECAST PRESTRESSED CONCRETE

DIVISION 4 – (NOT USED)

DIVISION 5 – METALS

05550 ALUMINUM RAILING

DIVISION 6 TO 16 – (NOT USED)



CITY OF OPA-LOCKA REQUEST FOR PROPOSALS RFP
NO: 23-1016200
SESAME STREET CULVERT REPLACEMENT

Sealed proposal for SESAME STREET CULVERT REPLACEMENT for the City of Opa-locka will be received by the City's Clerk Office, 780 Fisherman St, 4th Floor, Opa-locka, Florida 33054, **Monday, October 16, 2023, by 2:00pm EST.** Any RFP Package received after the designated closing time will be returned unopened. The OCRA will be accepting proposals by mail, however it is your responsibility to submit your proposal by the due date. In addition, proposal may be submitted via www.demandstar.com (e-bid) by 2:00pm.

The address to submit sealed proposal is listed below:

CITY OF OPA-LOCKA
Office of the City Clerk
780 Fisherman Street, 4th Floor Opa-locka,
Florida 33054

An original and six (6) copies for a total of seven (7) plus 1 copy of the Proposal package on USB Flash Drive in PDF format shall be submitted in sealed envelopes/packages addressed to the City Clerk, City of Opa-locka, Florida, and marked **RFP for SESAME STREET CULVERT REPLACEMENT.**

Proposers desiring information for use in preparing proposals may obtain a set of such documents by visiting the City's website at www.opalockafl.gov or www.demandstar.com.

The City reserves the right to accept or reject any and all proposals and to waive any technicalities or irregularities therein. The City further reserves the right to award the contract to that proposer whose proposal best complies with the **RFP NO: 23-1016200** requirements. Proposers may not withdraw their proposal for a period of ninety (90) days from the date set for the opening thereof.

A pre-bid meeting will be held on **Wednesday, September 27, 2023 at 2:30 p.m.** at 780 Fisherman Street, 4th Floor, Opa-locka, FL 33054 and via Microsoft Teams.

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting
Meeting ID: 279 204 897 403
Passcode: v7ASXu
Download Teams | Join on the web Learn
More | Meeting options

Joanna Flores, CMC City
Clerk

CITY OF OPA-LOCKA
REQUEST FOR PROPOSALS RFP NO: 23-1016200
SESAME STREET CULVERT REPLACEMENT

PROPOSAL GUIDELINES

1-1. Introduction: The City of Opa-locka seeks proposals for SESAME STREET CULVERT REPLACEMENT. The City is soliciting bids on behalf of the City Manager's Office for SESAME STREET CULVERT REPLACEMENT under the laws of the State of Florida. These services must be efficient and economical, adhere to industry standards and best practices, and utilize the latest nonproprietary technology. The Contract will be awarded to the highest ranked Proposer, as described in the Evaluation Procedures Section below.

1-2. Proposal Submission and Withdrawal: The City of Opa-locka will be accepting proposals by mail, however it is Proposer's responsibility to submit Proposer's proposal by the due date. In addition, proposals may be submitted via www.demandstar.com (e-bid). The City must receive all proposals by 2:00 p.m. on tba, 2023. The address to submit sealed proposals is listed below:

CITY OF OPA-LOCKA Office of the City Clerk
780 Fisherman Street, 4th Floor Opa-locka,
Florida 33054

To facilitate processing, please clearly mark the outside of the proposal package as follows: RFP NO. 23-1016200 – SESAME STREET CULVERT REPLACEMENT. This package shall also include the Proposer's return address.

Proposers may withdraw their proposals by notifying the City in writing at any time prior to the deadline for proposal submittal. After the deadline, the proposal will constitute an irrevocable offer, for a period of 90 days. Once opened, proposals become a record of the City and will not be returned to the Proposer.

The City cautions Proposers to assure actual delivery of mailed or hand-delivered proposals directly to the City Clerk's Office at 780 Fisherman Street, 4th Floor, Opa-locka, Florida 33054 prior to the deadline set for receiving proposals. Telephone confirmation of timely receipt of the proposal may be made by calling (305) 688-4611 before proposal closing time. Any proposal received after the established deadline will not be considered and will be returned unopened to the Proposer(s).

1-3. Number of Copies: Proposers shall submit an original and six (6) copies (a total of 7) plus one copy on USB flash drive in PDF format of the proposal in a sealed, opaque package marked as noted above. The Proposer will be responsible for timely delivery, whether by personal delivery, US Mail or any other delivery medium.

1-4. Development Costs: Neither the City nor its representatives shall be liable for any expenses incurred in connection with preparation of a response to this Request for Proposal. Proposers should prepare their proposals

simply and economically, providing a straightforward and concise description of the Proposer's ability to meet the requirements of the RFP.

1-5. Inquiries: The City Clerk will receive written requests for clarification concerning the meaning or interpretations of the RFP, until eight (8) days prior to the submittal date. City personnel are authorized only to direct the attention of prospective Proposers to various portions of the RFP so that they may read and interpret such for themselves. No employee of the City is authorized to interpret any portion of this RFP or give information as to the requirements of the RFP in addition to what is contained in the written RFP document.

1-6. Addendum: The City may record its response to inquiries and any supplemental instructions in the form of written addenda. The City may mail written addenda up to three (3) calendar days before the date fixed for receiving the proposals. Proposers shall contact the City to ascertain whether any addenda have been issued. Failure to do so could result in an unresponsive proposal. Any oral explanation given before the RFP opening will not be binding.

All Proposers are expected to carefully examine the proposal documents. Any ambiguities or inconsistencies should be brought to the attention of the City's Purchasing Agent through written communication prior to the opening of the proposals.

1-7. Contract Awards: The City anticipates entering into an Agreement with the Proposer who submits the proposal judged by the City to be most advantageous. The Proposer understands that this RFP does not constitute an offer or an Agreement with the Proposer. An offer or Agreement shall not be deemed to exist and is not binding until proposals are reviewed, accepted by appointed staff, the best proposal has been identified, approved by the appropriate level of authority within the City and executed by all parties. The City anticipates that the final Agreement will be in substantial conformance with this sample Agreement; nevertheless, Proposers are advised that any Agreement may result from the RFP may deviate from the Sample Agreement. The City reserves the right to reject all proposals, to abandon the project and/or to solicit and re- advertise for other proposals.

1-8. Contractual Agreement: This RFP and Consultant/Contractor proposal shall be included and incorporated in the final award. The order of contractual precedence will be the Contract or Agreement document, original Terms and Conditions, and Proposer response. Any and all legal action necessary to enforce the award will be held in Miami-Dade County and the contractual obligations will be interpreted according to the laws of Florida. Any additional contract or agreement requested for consideration by the Proposer must be attached and enclosed as part of the proposal.

1-9. Selection Process: The proposals will be evaluated and assigned points. The firm with the highest number of points will be ranked first; however, nothing herein will prevent the City from assigning work to any firm deemed responsive and responsible.

The City reserves the right to further negotiate any proposal, including price, with the highest rated Proposer. If an agreement cannot be reached with the highest rated Proposer, the City reserves the right to negotiate and recommend award to the next highest Proposer or subsequent Proposers until an agreement is reached.

1-10. Public Records: Upon award recommendation or ten (10) days after opening, whichever occurs first, proposals become "public records" and shall be subject to public disclosure consistent with Chapter 119 Florida Statutes. Proposers must invoke the exemptions to disclosure provided by law in the response to the RFP, and must identify the data or other materials to be protected, and must state the reasons why such exclusion from public disclosure is necessary. Document files may be examined, during normal working hours.

1-11. News Releases: The Proposer shall obtain the prior approval of the City Manager's Office for all news releases or other publicity pertaining to this RFP or the service, study or project to which it relates.

1-**12**. Insurance: The awarded Proposer(s) shall maintain insurance coverage reflecting at least the minimum amounts and conditions specified herein. In the event the Proposer is a governmental entity or a self-insured organization, different insurance requirements may apply. Misrepresentation of any material fact, whether intentional or not, regarding the Proposers' insurance coverage, policies or capabilities may be grounds for rejection of the proposal and rescission of any ensuing Agreement.

1. Evidence of General Liability coverage with limits not less than $1,000,000 per Occurrence/ $2,000,000 Aggregate (Including Policy Number and Policy Period);

2. Evidence of Auto Liability coverage with limits not less than $1,000,000 per Occurrence/$1,000,000 Aggregate (Including Policy Number and Policy Period);

3. Evidence of Workers' Compensation coverage with statutory limits and Employer's Liability coverage with limits not less than $100,000 (Including Policy Number and Policy Period);

4. The City listed as an additional insured (this may be specifically limited to the specific job(s) the contractor will be performing);

5. Minimum 30-day written notice of cancellation.

1-**13**. Licenses: Proposers, both corporate and individual, must be fully licensed and certified in the State of Florida at the time of RFP submittal. The proposal of any Proposer who is not fully licensed and certified shall be rejected.

1-**14**. Public Entity Crimes: Award will not be made to any person or affiliate identified on the Department of Management Services' "Convicted Vendor List". This list is defined as consisting of persons and affiliates who are disqualified from public contracting and purchasing processes because they have been found guilty of a public entity crime. No public entity shall award any contract to or transact any business in excess of the threshold amount provided in Section 287.017 Florida Statutes for Category Two (currently $25,000) with any person or affiliated on the "Convicted Vendor List" for a period of thirty-six (36) months from the date that person or affiliate was placed on the "Convicted Vendor List" unless that person or affiliate has been removed from the list. By signing and submitting the RFP proposal forms, Proposer attests that they have not been placed on the "Convicted Vendor List".

1-**15**. Code Of Ethics: If any Proposer violates or is a party to a violation of the code of ethics of the City of Opalocka or the State of Florida with respect to this proposal, such Proposer may be disqualified from performing the work described in this proposal or from furnishing the goods or services for which the proposal is submitted and shall be further disqualified from submitting any future proposals for work, goods or services for the City of Opalocka.

1-**16**. Drug-Free Workplace: Preference shall be given to businesses with Drug-Free Workplace (DFW) programs. Whenever two or more proposals which are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a proposal received from a business that completes the attached DFW form certifying that it is a DFW shall be given preference in the award process.

1-**17**. Permits and Taxes: The Proposer shall procure all permits, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

1-**18**. Protests: Protests of the plans, specifications, and other requirements of the request for proposal and bids must be received in writing by the City Clerk's Office at least ten (10) working days prior to the scheduled bid opening. A detailed explanation of the reason for the protest must be included. Protests of the award or intended

award of the bid or contract must be in writing and received in the City Clerk's Office within seven (7) working days of the notice of award. A detailed explanation of the protest must be included.

1-19. Termination for Convenience: A contract may be terminated in whole or in part by the City at any time and for any reason in accordance with this clause whenever the City shall determine that such termination is in the best interest of the City. Any such termination shall be affected by the delivery to the contractor at least five (5) working days before the effective date of a Notice of Termination specifying the extent to which performance shall be terminated and the date upon which termination becomes effective. An equitable adjustment in the contract price shall be made for the completed service, but no amount shall be allowed for anticipated profit on unperformed services.

CALENDAR EVENTS

EVENT	**DATE/LOCATION**	
Release Date	9/17/23	
Pre-Bid Meeting	9/27/23	
Written Questions Due	10/6/23 @ 5:00pm Email questions to jbergel@opalockafl.gov With Subject line "RFP No: Bid Questions"	
Response to Questions	10/10/23 @ 5:00pm	
Due Date/Bid Opening	10/16/23 @ 2:00 pm	at: City of Opa-locka Clerk Office 780 Fisherman Street, 4th Floor Opa-locka, Florida 33054 OR Electronic Bid on www.Demandstar.com

PHASE 1: 1st Evaluation Committee Meeting (Open to the Public).	TBA
Award Letter Recommendation	TBA
Post Award	TBA

GENERAL CONDITIONS

1.0 PERFORMANCE OF WORK: The Contractor shall supply all labor, transportation, materials, machinery, tools, apparatus, and equipment necessary for the entire proper and substantial completion of his work, and be accountable for the safe, proper and reasonable construction, maintenance and use of the same during construction, and shall remove all construction equipment upon completion, and shall perform all work in the best and most workmanlike manner. Special care shall be taken by the Contractor in placing and removing stockpiles of material, and in the work in general to avoid unnecessary injury to either public property or other areas adjacent to the work.

2.0 CONCURRENT WORK: Work may be performed concurrently by the utilities in the City or the City's Contractor in the right-of-way and it shall be the responsibility of the Contractor to coordinate his work with the utility companies, the City and the City's Contractors.

3.0 USE OF PUBLIC STREETS: Construction shall be performed in such a manner as to provide a minimum of inconvenience to the residents of the area. Any other excavated material spilled from trucks shall be removed by the Contractor and the streets shall be cleaned twice daily to the satisfaction of the Public Works Director.

4.0 EXISTING UTILITIES AND STRUCTURES: It will be the Contractor's responsibility to exercise all caution in the vicinity of any utility. The Contractor shall be fully responsible for, and make good all damages to buildings, telephone or other cables, sewers, water pipes, pavement, driveways, walls, sprinkler systems, survey markers, or other structures which may be encountered whether or not shown on the plans. The Contractor shall have a utility check performed prior to any construction.

4.1 The locations of existing utilities have been prepared using the best information available however, the information is not guaranteed. The Contractor shall be responsible for determining the location, character and depth of all utilities. The Contractor shall be responsible for and make good all damages to all pavement structures and utilities which may be encountered whether or not shown on the plans. The cost of restoration shall be included in the unit price stated in the proposal for the related work. No extras for restoration will be allowed.

4.2 The Contractor shall protect from damage all utilities, structures, surface and subsurface structures at or near the site of the work and shall repair or restore any damage to such facilities, except utilities, resulting from failure to comply with the requirements of this contract or the failure to exercise reasonable care in the performance of the work. If the Contractor fails or refuses to repair any such damage promptly, the City may have the necessary work performed and charge the cost thereof to The Contractor.

4.3 At points where The Contractor's operations are adjacent to utility facilities, which if damaged, might result in expense, loss, disruption of service or other undue inconvenience to the public or to the Owner, work shall not be commenced until all arrangements necessary for the protection thereof have been made by the Contractor. The Contractor shall be solely and

directly responsible to the Owner and operators of such utilities for any damage, injury, expense, loss, inconvenience, or delay caused by The Contractor's operations.

4.4 The Contractor shall not repair or attempt to repair utility damage but shall immediately contact the utility owner. The Contractor shall obtain the name, address, and telephone number of each utility company to contact. The Contractor shall submit to the Engineer these said names and addresses.

4.5 The Contractor shall comply with the Florida Building Code and City Code regarding precautions to be taken in the protection of existing vegetation, structure, utilities, and improvements.

4.6 The Contractor shall maintain access to fire hydrants and alarm boxes throughout the prosecution of the work. Hydrants and fire alarm boxes shall be kept clear and kept visible at all times unless approved otherwise. If visibility cannot be maintained, The Contractor shall provide clearly visible signs showing the location of the fire hydrant and fire alarm boxes.

4.7 The Contractor shall comply with the requirements of the Clean Air Act and the Federal Water Pollution Control Act as well as other requirements specified in those regulations and guidelines listed thereunder.

5.0 EXISTING LANDSCAPING: The Contractor shall be fully responsible for maintaining in good condition, existing trees, grass and shrubs situated within the designated right-of-way, project site or on private property adjacent to the work.

6.0 EXISTING SIGNS AND UTILITY CASTINGS: All existing signs and utility castings shall be preserved and shall remain the property of the City of Opa-Locka. Those not reused shall be delivered to the Opa-Locka Public Works Yard at 12950 NW 42 Ave in Opa-Locka, FL 33054.

7.0 STOCK PILING MATERIALS: Contractor shall not stockpile materials at the project site unless approved in writing by the Engineer.

8.0 PERMITS: The Contractor shall obtain all required occupational licenses and permits, etc., and pay all required fees. Permits issued by the City will be issued without charge to the Contractor.

9.0 EXTRAS: Bills for extras will be allowed only when work is ordered in writing and approved by the Public Works Director. No money will be allowed for extra work unless approved in writing, beforehand, by the Public Works Director.

10.0 CLEANING UP: The Contractor will be required to leave the work and adjacent areas free of any accumulated rubbish or surplus materials on a daily basis, unless

otherwise directed by the Public Works Director. In the event of failure or undue delay on the part of the Contractor, the City may employ such equipment and labor as may

be necessary, and charge such costs against the Contractor and deduct the amount from the monies due the Contractor for work performed.

11.0 RESTORATION: The Contractor shall complete all restoration as the work is completed but in no event later than five (5) working days.

12.0 TESTING: The Engineer or other person designated by the Public Works Director to supervise the work shall have the right at any time to have tests made on any material used on the job. All expenses for tests shall be borne by the City of Opa-Locka, except the cost of re-testing materials which failed to meet the specifications and waiting time due to Contractor failure to be ready for tests when scheduled. The cost and scheduling of such re-testing shall be the responsibility of the Contractor. All re-testing shall be done by the testing laboratory which test the failed samples. The Contractor will inform the City of his source of materials with sufficient time to secure the necessary samples and perform the necessary tests. The Contractor shall request and receive inspections of specific phases of work as required elsewhere in these specifications. The Contractor shall provide current modified proctor test results for all fill material used on the job.

13.0 PAYMENT: Payment will be made in full compensation for all work performed, materials, labor, tools and equipment furnished, and incidental expenses necessary to complete the work. Payment shall be made on 90% of the monthly estimate and upon the presentation of partial releases of lien. Final payment shall be made upon presentation of a completion statement, receipt of the final releases of lien, receipt of as-built drawings and after final acceptance by the City.

14.0 ACCEPTANCE: Acceptance by the City shall not relieve the Contractor of the responsibility of correcting any defective part of the work resulting from either workmanship or materials or replacing or repairing damaged property resulting from any phase of the Contractor's work.

15.0 GUARANTEE: The Contractor shall guarantee all materials and workmanship for a period of one year from the date of **acceptance** by the City.

16.0 LINE AND GRADE: Where required as determined by the Engineer, the City will establish a base line and reference elevations. All additional lines and grades required for completion of the work shall be furnished at the Contractor's expense.

17.0 TRAFFIC MAINTENANCE: The Contractor shall provide all temporary signing, striping, detouring, barricading, signals, competent flagmen, etc. required in accordance with the minimum requirements of the latest Manual of Uniform Traffic

Control Devices, whenever and wherever needed for pursuance of the project, and/or

as directed by the Engineer. The Contractor shall also coordinate these operations with the City of Opa-Locka Public Works Department. The Contractor shall supply the Engineer with a traffic maintenance plan.

18.0 PROTECTION OF WORK: It shall be the Contractors' responsibility to protect the public and workmen from ongoing construction hazards.

19.0 UNIFORMED POLICE: The Contractor shall be responsible for obtaining the services of the uniformed police officers as needed or as directed by the Engineer. The Contractor shall be reimbursed for the direct, actual expenses for such uniformed police officers.

20.0 INSPECTION: Inspection will be required during all phases of construction, and it shall be the Contractor's responsibility to contact the Engineer or its representative when any work is being performed. The Contractor shall also be responsible for coordinating all inspections of work performed by Subcontractors. Failure to contact the Engineer/Architect or its representatives to obtain the required inspections shall be sufficient cause for rejection.

21.0 LICENSES: The Contractor and all Subcontractors shall submit at the time of bidding, copies of all licenses held by the Company that pertain to the type of work to be performed under this contract. Failure to submit copies of licenses is grounds for rejection of the bid.

22.0 CONTACT PERSON: The Contractor shall provide the Engineer with a local (Miami Dade County) telephone number where the Contractor can be contacted 24 hours a day for the duration of the project.

23.0 UTILITY COORDINATION: The City will not be liable for any delay or added expense the Contractor experiences due to the actions of others, nor shall the City be held responsible for any damages which may be incurred, due to the actions of the Contractor or representative.

24.0 EXAMINATION OF PREMISES: Before submitting proposals for his work, each bidder will be held to have examined the premises and satisfied himself as to the existing conditions under which he will be obligated to work, including all conditions which will in any way affect the work under this contract.

25.0 NON-EXCLUSIVE CONTRACT: Nothing in this contract shall prevent the City from employing other contractors to perform the same or similar work. This can include other contractors working concurrently on the same location.

GC-4

THE CITY OF OPA-LOCKA OPA-LOCKA,

FLORIDA

SPECIAL CONDITIONS

1.0 SCOPE OF WORK:

1.1 SESAME STREET CULVERT REPLACEMENT: The work generally consists of but is not necessarily limited to the following: the selling, delivering and installing of Contractor furnished materials and equipment necessary for the complete replacement of a culvert within along Sesame Street between NW 135th Street and Atlantic Avenue. Replacement includes 66-inch Aluminized Steel piping with new curb and gutters, sidewalk, guardrail, and pavement resurfacing with all appurtenant for miscellaneous items and work for a completed project.

2.0 COMPLETE PROJECT REQUIRED: The specifications describe the various items or classes of work required enumerating or defining the extent of same where necessary to clarify the drawings, but failure to list any items shall not relieve the Contractor from furnishing, installing and performing such work where shown on the drawings, required by any part of the specifications or necessary for the satisfactory completion of the project.

3.0 WORK SCHEDULE: The Contractor shall submit schedules which show the order in which the Contractor proposes to carry out the work with dates for starting various parts of the work and estimated completion dates. The progress schedule s shall be furnished to the Engineer prior to the pre-construction meeting date which will be established by the City.

4.0 PRE-CONSTRUCTION MEETING: After the contract has been awarded and signed, but prior to commencement of work, a pre-construction meeting shall be held. The meeting shall be attended by authorized representatives of the City and Contractor. The purpose of this meeting will be to review the Contractor's submitted progress schedule, clarify jurisdiction and to acquaint all parties present with the authorized representative to be notified. The Contractor will be notified in writing as to the date and place of the meeting.

5.0 AS-BUILT INFORMATION: As work progresses, the Contractor must record all information pertaining to changes and deviations from the contract drawings with special attention to all underground installations. At completion of the job, the Contractor shall submit a complete set of reproducible as-built drawings to the City. Additionally, the Contractor shall maintain a field book with all deviations recorded.

The completed as-built sketches and field books shall become the property of the City. As-built information must be supplied with each pay request. Failure to provide as-built information is cause to reject pay request.

6.0 LIQUIDATED DAMAGES: Should the Contractor, or in the case of default, the surety, fail to fully complete the work within the time stipulated in the proposal, the minimum

sum of five hundred dollars ($500.00) per day shall be deducted from any money due the Contractor not as a penalty but as liquidated damages.

7.0 APPROVAL OF MATERIALS:

7.1 Whenever in these plans and/or specifications a certain brand of materials is specified, it is done for establishing the level of quality, capacity and the characteristics desired. Materials or products specified by the name of manufacturer or the brand or trade name or catalog reference shall be the basis of the bid.

7.2 The Contractor shall make written request for the use of alternate materials within ten (10) days after the Contract is signed, and before ordering any materials requiring approval. If the Contractor makes no request for approval of alternate materials within ten (10) days of the signing of the Contract, it shall be assumed that he intends to furnish the items specified.

7.3 The use of materials other than that specified without the written approval of the Engineer shall be sufficient reason for rejection of the work.

8.0 USE OF PUBLIC STREETS: Construction in the right-of-way or streets shall be performed in such a manner as to provide a minimum of inconvenience to the residents of the area. Access to all residents' homes shall be maintained at all times. A minimum of one traffic lane shall be open at all times.

9.0 STRIPING:

9.1 Temporary striping shall be placed within 48-hours of completion of each course of asphalt unless another course is placed within 48-hours. The cost of temporary striping shall be included in the unit cost of permanent thermoplastic striping.

9.2 Permanent thermoplastic striping shall be placed within 30 days of completing final paving unless otherwise approved by the Engineer.

10.0 RESTORATION OF SURVEY MARKERS: When existing survey markers are removed or destroyed as a result of the construction, it shall be the responsibility of the contractor to replace them using a registered licensed surveyor.

11.0 PROJECT LAYOUT: The Contractor shall layout the proposed work and contact all utilities to verify utility locations. If changes are required, due to conflict or design, the Engineer will make the final determination.

12.0 WORKING HOURS: The normal City working hours are Monday through Friday 8:00 a.m. until 5:00 p.m.

13.0 FINANCIAL STATEMENT: As part of the Contractor's submittal, he/she shall include a certified financial statement detailing the company's financial status over the previous two years.

14.0 NOTICE TO PROCEED: A single notice to proceed will be issued for this project. Upon receipt of the notice to proceed, the contractor shall commence work upon the site(s) within 10 working days and continue such work in an expeditious manner to a conclusion acceptable to the Engineer. No more than 7 consecutive days without construction activity will be allowed unless approved by the Engineer.

15.0 ENVIRONMENTAL PROTECTION:

General Requirements – The Contractor shall provide and maintain environmental protection during the life of the Contract. Environmental protection shall be provided to correct conditions that develop during the conductance of the work, or that are required to control pollution that develops during the development of project. The Contractor's operations shall comply with all Federal, State and local regulations pertaining to water, air, solid waste, and noise pollution.

Protection of Natural Resources – It is intended that the natural resources within the site and outside the limits of permanent work performed under this Contract be preserved in their existing condition or be restored to an equivalent or improved condition upon completion of the work. The Contractor shall confine his work activities to areas defined by the Contract Documents. All work under this contract shall be performed in such a manner that any adverse environmental impacts are reduced to a level that is acceptable to the City. At all times special measures shall be taken to prevent oily or hazardous substances from entering the ground, drainage areas, or local bodies of water.

Control and Disposal of Wastes – The Contractor shall transport and dispose of all waste in a manner that complies with Federal, State, and local requirements. The Contractor shall provide the Engineer with a copy of any state and/or local permits or licenses which reflect such agency's approval and compliance with applicable solid waste disposal regulations. The permits or licenses which reflect such agency's approval and compliance with applicable solid waste disposal regulations. The permits or licenses and the location of the disposal area shall be provided prior to transporting any waste material. Fueling and lubricating of equipment and motor vehicles shall be conducted in a manner that affords the

maximum protection against spills and evaporation. Lubricants and waste oil shall be disposed of in accordance with approved procedures meeting Federal, State and local regulations.

Preservation of Water Courses – The Contractor shall maintain the working area free of excess debris and litter. Furthermore, the Contractor shall take all necessary precautions to protect the Canal waterway in a manner that complies with Federal, State, and local requirements.

The maximum use of low-noise emission products as certified by the Environmental Protection Agency shall be made when available.

16.0 SAFETY: The Contractor shall be responsible for the safety of the Contractor's employees. The Contractor shall abide by all Federal, State, County, and City safety requirements and regulations. The Contractor is responsible to furnish the Contractor's employees with all required safety equipment. The Contractor is required to comply with all applicable OSHA regulations including, Right to Know, Confined Space Entry, Airborne Blood Pathogens.

The Contractor is fully responsible to furnish safety equipment to all of the Contractor's employees on the Owner's job site, including but not limited to safety glasses, gloves, vests, hard hats, braces or any other required safety item. The Contractor is required to make certain that each employee is wearing the proper safety clothing including shoes.

17.0 CONFINED SPACE ENTRY PERMIT: The Contractor must comply with all the provisions contained in OSHA 1910.146 and shall show proof of compliance with the first project invoice. No payment shall be made until such proof is presented and approved by the City.

TECHNICAL SPECIFICATIONS

DIVISION 1 – GENERAL REQUIREMENTS

01010 SUMMARY OF WORK

PART 1 – GENERAL 1.0.1

SCOPE OF WORK

A. This section describes the project in general and provides an overview of the extent of the work to be performed under this Contract. Detailed requirements and extent of work is stated in the applicable Specification sections and shown on the Contract Drawings. The Contractor shall, except as otherwise specifically stated herein or in any applicable parts of the Contract Documents, provide and pay for all labor, materials, equipment, tools, construction equipment, and other facilities and services necessary for proper execution, testing, and completion of the work under this Contract.

1.0.2 DEFINED TERMS

A. As-Built Drawings: As-built drawings reflect field changes and construction modifications to the conformed Bid Documents.

B. Contract Documents: Shall mean all those documents named in the contract.

C. Contractor: Contractor shall mean any person engaged to supply labor, materials or equipment for use in the fulfillment of the project.

D. Construction Drawings: Shall mean the drawings, plans, or reproduction thereof which show scope, character, location, dimensions, and other details of the work to be performed under the Contract Documents.

E. Engineer: Shall mean the City Engineer of the City of Opa-Locka, Public Works Department, or City's designee.

F. Project: Shall mean and include all construction, for which the Contractor is responsible under the contract documents

G. Regulations: Shall mean laws, ordinances, statutes, and lawful order issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the work.

H. The City: Shall mean the City of Opa-Locka, Florida.

I. Work: Shall mean all labor, permits, bonds, equipment, materials and incidentals required.

1.0.3 SPECIFICATIONS

A. The specifications included in these Contract Documents establish the minimum performance and quality requirements for materials and equipment together with the minimum standards for quality of workmanship and appearance. Generally, there has been no attempt to separate the Specification sections into groups for the work of separate Subcontractors, or for work to be performed by the various trades. Should there be any question as to the interpretation of any Specification section or part of Specification section, such question should be directed to the Engineer prior to the submittal of a proposal for the work under this Contract.

B. The Sesame Street Culvert Replacement work shown on the drawings is intended to be comprehensive and descriptive, not an exact and complete representation of the actual finished work. Pipeline replacement shall include all accessories and components required to provide a complete and satisfactory system as specified, even though some items may not be specifically shown on the drawings.

C. It is the intent of the City to obtain a complete functional, and satisfactory installation under this Contract, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the plans or stated herein.

D. The Contractor shall also supply all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

1.0.4 REASONABLY IMPLIED PARTS OF THE WORK

A. Any part of the work which is not mentioned in the specifications but is shown on the drawings, or any part not shown on the drawings but described in the specifications, or any part not shown on the drawings nor described in the specifications, but which is necessary or normally required as a part of such work, or is necessary or required to make each installation satisfactorily and legally operable, shall be performed by the Contractor as incidental work, without extra cost to the City, as if fully described in the specifications and shown on the drawings, and the expense thereof shall be included in the applicable unit prices or lump sum bid for the Work.

1.0.5 DESCRIPTION OF WORK

A. The project includes the in-kind replacement of the existing culvert with design amendments to ensure adequate conveyance capacity, pedestrian and vehicular transit safety, and proper scour protection. The project would involve the demolition of the existing culvert structure, excavation for new structures, sloped backfill for culvert installation, new concrete pipe culvert, embankment saddle slope stabilization with riprap, new top slab, asphalt pavement restoration, pavement markings, reconstructed sidewalk, and new guard rails.

B. The project is located along Sesame Street, between the intersections with Atlantic Avenue and NW 135th Street, Opa-Locka, Florida 33054.

C. It is the intent of the City to obtain a complete and working installation under this Project and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.0.6 PROJECT BACKGROUND

During a recent milling and resurfacing project, it was discovered by the City's contractor that the culvert was in poor condition and would not withstand the work underway. After an assessment, it was recommended to replace the existing culvert structure with a new culvert that will be designed for current system demands and will provide a permanent installation, that maintains safe pedestrian and vehicular traffic, and a provides a prolonged service life. As a result of the damages discovered, Sesame Street is currently closed to traffic, and will remain closed until its replacement is finalized.

1.0.7 WORK COVERED BY CONTRACT DOCUMENTS

A. Following receipt of Notice to Proceed with the work, the Contractor shall notify the Engineer at least ten (10) days before he/she is ready to start actual construction, to allow the City time to make arrangements for inspection of the work.

B. Work under the Contract shall be scheduled and performed in such a manner as to result in the least possible disruption to the operation of the existing facilities. Any control modifications to the existing facilities shall not be made without first obtaining written permission form the Engineer and the City.

C. Critical events in the sequence of construction are specified herein. The outline sequence of construction does not include all items necessary to complete the work but is intended to identify the sequence of critical events necessary to minimize disruption to the ongoing operation. The sequence of construction is a precedence requirement and does not attempt to schedule the Contractor's work. It is intended

only to indicate which activities must precede other activities in order to minimize interference and disruptions.

D. The existing facilities shall be maintained in an operable condition by the Contractor during construction, as indicated in the sequence of construction. All work by the Contractor that disrupts the normal operations shall be shown on the Construction Schedule and specifically scheduled with the City's staff. The schedule notification shall consist of a written notice defining the work to be accomplished, the function that will be interrupted, the duration of the interruption, and the mitigation effort to be performed by the Contractor to maintain systems capacity continuously. The written notice shall be submitted to the City fourteen (14) days in advance of the proposed work and the City will respond to the Contractor in writing within seven (7) days of receipt of the notice regarding the acceptability of the proposed plan.

1.0.8 SEQUENCE OF CONSTRUCTION

A. The general sequence of construction shall be as follows, but **a detailed sequence of construction shall be submitted by the Contractor and approved by the Engineer before any work is started**. The City reserves the right to make changes to the sequence as necessary to facilitate the work or to minimize conflict with operations and no extra compensation will be allowed.

B. CAPITALIZED ITEMS INDICATE WORK OR FUNCTIONS TO BE PERFORMED BY CITY FORCES. All other items shall be performed by the Contractor with special emphasis on the fact that numerous standard and miscellaneous construction phases are not mentioned specifically but shall be performed by the Contractor as required for a complete Project.

Note: For simplicity, the Sequence of Construction below will not detail the following items. **These shall be the responsibility of the Contractor and no extra compensation will be allowed.**

1. Contractor's field verification of all information provided in the Plans and to determine the type, location, elevation and extent of any utilities which may not have been shown on the Plans.

2. Notify "Sunshine State One-Call of Florida Inc., 811," forty-eight (48) hours prior to any excavation. Locate all utilities along the route of the Project.

3. Contractor's operations involving removal of the existing Culvert shall include:

a. Excavate existing Culvert pipes and provide proper flow diversion between the Canal.

4. Installation of new Culvert system, including: piping, mitered end section, backfilling, rip rap placement, and concrete pavement.

5. Construction of concrete curb and gutter, sidewalk, handicap access ramp, and guardrails.

6. Milling and resurfacing of pavement extents.

7. Contractor's PSM shall reestablish the design baseline, vertical control points and reference points, and establish proposed pipeline location in accordance with Section 02314 “Excavation, Backfill and Fill for Structural Facilities and Utility Systems - Construction Methods."

8. After items 6 and 7 are completed, the Contractor shall meet with the City Inspector at the Project site and perform a pre-construction walk-through along the entire route of the Project to identify possible problems or conflicts with the proposed pipeline location.

9. The general sequence of work shall be as follows:

1) Phase I – Mobilization

Step – 1 Initiate mobilization. The Contractor shall set up storage, staging and parking areas, temporary environmental controls and tree protection devices in the project site. Obtain permits, develop and submit construction schedule and start shop drawing submittal. Contractor shall allow access to the other facilities within the project area, including adjacent businesses and homes at all times during construction.

Step – 2 Call for locates (Sunshine 811) and document all location marks in the field.

Step – 3 Contractor shall include the necessary provisions to safeguard the existing utilities noted within the project area. Furthermore, the Contractor shall be advised that the utilities shown on plans are based on best available information and shall take all necessary precautions to confirm, identify, preserve, and maintain the integrity while performing construction.

Step – 4 Contractor shall **immediately** open a dialog with all existing utilities in the project area. Contractor shall notify Engineer of any utility relocation requirements and costs. Utility relocations shall be reimbursed under a dedicated allowance account. Failure to properly coordinate any required utility relocations may result in delays for which the Contractor may be liable for.

Step – 5 Verify locations, elevations, dimensions, manufacturer of pipes, equipment, etc., before ordering materials to complete the work in accordance with the Contract Documents, Shop Drawings and field conditions.

Step – 6 Upon approval of shop drawings, order long lead items so that materials may be delivered in a timely fashion without delays to construction.

2) Phase II – Demolition of Existing Culvert and Appurtenances NOTE: Refer to Drawings, Sheets C-01 and C-02

Step – 1 Installation of all Erosion Control measures within the Canal.

Step – 2 Removal of existing concrete pavement, concrete headwall, and culvert piping.

Step – 3 Prepare temporary bypass system, if necessary, to divert Canal flows from East to West and vice versa. After successful flow diversion and authorization by the City; the Contractor shall proceed with the installation of the removal of the existing Culvert piping.

3) Phase III – New Culvert Installation

Step – 1 Prepare bedding material to lay stone base for new piping.

NOTE: The Contractor shall provide appropriate shoring to conduct the stone bedding and 66-inch SRASP pipe installation in dry conditions.

Step – 2 Secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations.

Step – 3 The Contractor shall secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations and up to elevation established on plans. Embankment slopes shall be established.

Step – 4 Install concrete headwall at pipe ends.

Step – 5 Install geotextile matting and, sand-cement and Rubble Stone embankment stabilization.

Step – 6 Lay new concrete curb and gutter and sidewalk.

Step – 7 Install new guardrail.

Step – 8 Install new concrete shoulder barrier

4) Phase IV – Final Sitework and Project Closeout

Step – 1 Form and pour the 8” thick concrete pavement surface above Culvert piping.

Step – 2 Lay new concrete curb and gutter and sidewalk.

Step – 3 Mill and resurface top 1” surface course of roadway.

Step – 4 Paint roadway pavement markings and remove temporary construction signage.

Step – 5 Demobilization and related closeout activities shall be in accordance with section 01700 “Project Closeout”.

Step – 6 Complete all remaining miscellaneous and appurtenant work, including restoration of damaged survey control points, landscape restoration and final inspection and cleanup.

C. The Contractor's equipment must be in first class operating condition, including proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment. The Contractor shall provide a temporary electric service for his electric equipment as specified herein below, and shall pay all cost thereof, including all charges for electricity used during the entire course of the project until its acceptance by the City. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01011 SITE CONDITIONS

PART 1 – GENERAL

1.0.1. SITE INVESTIGATION

A. The Contractor acknowledges that he has satisfied them as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation: disposal, handling and storage of materials; availability of labor, water, electric power, roads; disposal of water from construction; uncertainties of weather; the conformation and conditions of the ground; the type of equipment and facilities needed preliminary to and during the prosecution of work and all other matters which can in any way affect the work or the cost thereof under this contract.

B. The Contractor further acknowledges that he has satisfied himself as to the character, quality, and quantity of surface materials to be encountered from inspecting the site and from evaluating information derived from exploratory work that may have been done by the City included with these contract documents. Any failure by the Contractor to acquaint the City or them with all the available information will not relieve them from the responsibility for properly estimating the difficult or cost thereof under this Contract.

C. The Contractor acknowledges that by personal field observation or other means satisfactory to himself, performed prior to the bid, he has included in the prices bid all costs for dealing with all construction problems create by observable above or on grade features on or adjacent to the site of the site of the work whether or not these features are shown on the plans or described in the specifications. In instances where the observable features indicate subsurface conditions which may affect the project work, as for example, a pavement patch or catch basin gratings indicating respectively a utility or storm sewer not shown on the plans, the Contractor acknowledges that he has made timely, diligent, inquiry of the Engineer or by other means fully satisfied themselves prior to the bid as to the nature of, and costs created by, the subsurface condition and included all costs therefore in the prices bid.

1.0.2. SITE CONDITIONS

A. All information obtained by the City regarding the site conditions, topography, subsurface information, groundwater contamination, groundwater elevations, existing construction of site facilities as applicate, and similar data will be made available for inspection at the office of the Engineer upon request. Such information is offered as advisory information only. Neither the Engineer nor the City assumes any responsibility for the completeness of, or for the Contractor’s interpretation of, such advisory information. Prior to bidding and after written approval from the City, bidder

shall make his own investigations to satisfy themselves with site conditions at their own cost.

B. Surface investigations, including test borings, have been made to indicate subsurface conditions at locations in the project.

C. Prospective bidders are advised, at their own expense, to make such subsurface investigation, by boring or test hole excavation, as may be desirable. However, such work shall be scheduled by appointment with the Engineer if for a City site or by notification to the City and property permitted if in the public right of way.

1.0.3. DIFFERING SUBSURFACE CONDITIONS

A. In the event Subsurface or latent physical conditions are found materially different from those indicated in these documents and differing materially from those ordinarily encountered and generally recognized as inherent in the character of work covered in these project documents, promptly, and before such conditions are disturbed, notify the Engineer in writing of such changed conditions.

B. The Engineer will investigate such conditions promptly and following this investigation, the Contractor shall proceed with the work, unless otherwise instructed by the Engineer. If the Engineer finds that such conditions do so materially differ as to cause an increase or decrease in cost and time considered reasonable by the Engineer, the City will make the final decision regarding any adjustment in cost or time for completion.

C. In the event that site conditions differ from those expected by the Contractor, the Contractor shall proceed to complete the work as contemplated by the plan and specifications on his own cost and expense. If in the discretion of the Engineer, the difference in site conditions renders completion of the work as described by the plans and specifications impossible, the Engineer may alter the work, whereupon the Contractor shall be compensated for any extra work pursuant to “Extra Work and Payment therefore” of the special conditions; the Engineer shall no alter the work where the site conditions render the work more difficult or costly to perform, if such work is otherwise still possible as described in the contract documents.

1.0.4. EXISTING UTILITIES AND LOCATION SERVICES

A. Known utilities and structures adjacent to or encountered in the work are shown on the drawings. The locations shown are taken from existing records and the best information available from the existing plans; However, it is expected that there may be some discrepancies and omissions in the locations and quantities of utilities and structures shown. Those shown are for the convenience of the Contractor only, and no responsibility is assumed by either the Engineer or the City for their accuracy or completeness.

B. **No request for additional compensation or Contract time (except for a noncompensable time extension at the sole discretion of the Engineer, whose decision shall be final) resulting from encountering utilities or structures not shown, or differing in location or elevation from that shown, will be considered. The Contractor shall explore sufficiently ahead of the work to allow time for any necessary adjustments without delay to the progress of the installation. Costs due to delays occasioned by encountering underground utilities or structures which could have or should have been discovered by timely exploration ahead of the work shall rest solely with the Contractor.**

C. Prior to proceeding with excavation, the Contractor shall contact all utility companies and all other users of the right of way in the area to aid in locating their underground services. It shall be the Contractor's responsibility to contact utility companies at least three (3) normal working days before starting construction. The Contractor shall proceed with caution in the excavation and preparation so that the exact location of underground utilities may be determined.

D. It is the responsibility of the Contractor to ensure that all utility or other existing facilities, the stability of which may be endangered by the close proximity of excavation, are temporarily held in position while work proceeds in the vicinity of the facilities and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.

E. The Contractor shall take all reasonable precautions against damage to existing utilities. However, in the event of a break in an existing water main, gas main, sewer or underground cable, the Contractor shall immediately notify the responsible official of the organization operating the interrupted utility. The Contractor shall lend all possible assistance in restoring services and shall assume all cost, charges, or claims connected with the interruption and repair of such services, as determined by the City.

1.0.5. CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

A. Where the Contractor's operation could cause damage or inconvenience to railway, telephone, fiber optic, television, electrical power, oil, gas, water, sewer, irrigation system, or any other utility, public or private, the Contractor shall make all arrangements necessary for the protection of these utilities and services.

B. Notify all utility companies that are affected by the construction operation at least fortyeight (48) hours in advance. Under no circumstance expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities and utility poles where necessary. **Absolutely no extra compensation will be allowed for construction problems created by utility poles of whatever size, overhead electric, telephone or other lines whether shown on the plans or not. The Contractor is solely responsible for discovering such items in the field prior to bidding and including all costs for such work in the prices bid.**

C. The Contractor and his Subcontractor shall be solely and directly responsible to the Owners and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this contract.

D. Neither the City nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractors failure to protect utilities encountered in the work.

E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no event shall interruption of any utility service be allowed unless granted by the Owner of the utility.

F. In the event water service lines that interfere with construction are encountered, the Contractor may, by obtaining prior approval of the water utility, cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense and as approved by the Engineer.

G. Replace, with material approved by the Engineer, at Contractor's expense, any and all other laterals, existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents and as approved by the Engineer.

1.0.6. INTERFERING STRUCTURES

A. Take necessary precautions to prevent damage to existing structures whether on the surface, above ground, or underground. An attempt has been made to show major structures on the plans. While the information has been compiled from the best available sources, its completeness and accuracy cannot be guaranteed, and is presented as a guide. The Contractor is solely responsible for field verification of all information provided and to determine the type, location, elevation and extent of any utilities which may not have been shown on the plans.

1.0.7. FIELD RELOCATION

A. During the process of construction, it is expected that minor relocations of the work may be necessary. Such relocations shall be made only by the direction of the Engineer at the Contractor's expense. If existing structures are encountered that will prevent construction as shown, notify the Engineer before continuing with the work in order that the Engineer may make such field revisions as necessary to avoid conflict with the existing structures. If the Contractor fails to notify the Engineer when an existing structure is encountered, and proceeds with the work despite this interference the Contractor does so at his own risk.

B. Representatives of utility companies, the railroad companies, the traffic and transportation authorities, etc., shall be notified in accordance with the provisions set forth in the relevant sections of the specifications and the permitting documents.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01015 INDEX OF DRAWINGS

PART 1 – GENERAL 1.0.1.

PLANS BY THE CITY

A. Plans dated November 2022 and any subsequent revision, thereto, introduced by Addenda prior to bid, showing this work, are hereby made a part of the Contract Documents, and are **listed** as follows:

OPA-LOCKA CULVERT REPLACEMENT

Sheet No.	Drawing No.	Title
GENERAL		
G-01		TITLE SHEET, LOCATION AND LIST OF DRAWINGS
G-02		ABBREVIATION, SYMBOLS, GENERAL NOTES AND LEGENDS CIVIL
C-01		DEMOLITION AND EROSION CONTROL PLAN
C-02		DEMOLITION AND EROSION CONTROL NOTES AND DETAILS
C-03		PROPOSED SITE PLAN & GRADING PLAN
C-04		PAVEMENT RESTORATION PLAN
C-05		PAVEMENT MARKING AND SIGNAGE
C-06		MOT PLAN
C-07		MOT DETAILS
C-08		STANDARD DETAILS
C-09		STANDARD DETAILS
C-10		STANDARD DETAILS
C-11		STANDARD DETAILS
S-1		PIPE CULVERT STRUCTURAL DETAILS
S-2		PIPE CULVERT STRUCTURAL DETAILS

B. **Due to the possibility of typing errors or omissions, the above list shall not be considered as necessarily complete, nor shall the County/FDOT Standard Details which may be included elsewhere herein be considered as forming a complete listing of all County/FDOT Standard Details which may apply to this Project. Perform all work shown on all sheets of the Plans, as specified herein or necessary for a complete functional installation and no extra compensation will be made due to the omission or incorrect listing of a Drawing in this Section. All County/FDOT Standard Details are incorporated in these Contract Documents by reference and all work shall be performed in accordance with all applicable County/FDOT Standard Details.**

PART 2 PRODUCTS NOT

USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01016 SAFETY REQUIREMENTS, HURRICANES PREPAREDNESS AND PROTECTION OF PROPERTY

PART 1 – GENERAL

1.0.1. CONTRACTOR'S RESPONSIBILTY FOR SAFETY

A. Conduct whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees) and property during the contract period. This requirement shall apply continuously and not be limited to normal working hours.

B. The Contractor shall be in compliance with all applicable provisions of the Occupational Safety and health Act of 1970. The Contractor's Manual of Safety Practices, dealing with the firm's policies on field safety procedures for employees shall be submitted to the Engineer for his review before "Notice to proceeded" will be issued.

C. Neither the professional activities of the design professional, nor the presence of the design Professional nor his or her employees and subconsultants at a construction site, shall relieve the Contractor and any other entity of their obligations, duties and responsibilities including but not limited to, construction means, methods, sequence techniques or procedures necessary for performing, superintending, or coordinating all portions of the work of construction in accordance with the project documents and any health and safety precautions required by any regulatory agencies.

1.0.2. FEDERAL STATE AND LOCAL SAFETY REQUIEREMENTS

A. Safety provisions shall conform to the federal and state Departments of labor Occupational Safety and Health Act (OSHA), and all other applicable federal, State, County, and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of these project Documents. Where any of these are in conflict, the more stringent requirements shall be followed. Contractor's failure to thoroughly familiarize with the safety provisions shall not relieve him/her from compliance with the obligations and penalties set forth therein.

B. All excavations made in the earth shall be performed in compliance with the State of Florida Trench Safety Act, OSHA 29 CFR 1926 Subpart P (Chapter 90-96, Laws of Florida). The Contractor shall appoint a ***competent person***, in accordance with subpart P, who shall be present at the jobsite. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

C. The Contractor shall be familiar with the "Underground facility Damage" Prevention and safety Act" Florida Statute 556. The Contractor shall contact the Sunshine State One Call of Florida, at 01-800-432-4770 or by submitting an internet ticket entry via www.sunshine811.com) at least 48 hours prior the excavation. Failure to familiarize himself with the safety provisions shall not relieve him/her from compliance with the obligations and penalties set forth therein.

D. Conduct operations in such a manner utilizing warning devices, such as traffic cones, barricades and warning lights that traffic, pedestrian and City personnel are given adequate warning of hazards of the worksite as may be deemed necessary by the City, Engineer of Record, and governing agency having jurisdiction over the work or political subdivision.

E. The Contractor shall be in compliance with all applicable provisions of the OSHA Code of Federal Regulations (CFR), including, but not limited to, the following:

1. 29 CFR Part 1910 Subpart D - Walking-Working Surfaces
2. 29 CFR Part 1910 Subpart G - Occupational Health and Environmental Control
3. 29 CFR Part 1910 Subpart H - Hazardous Materials
4. 29 CFR Part 1910 Subpart I - Personal Protective Equipment
5. 29 CFR Part 1910 Subpart J - General Environmental Controls
6. 29 CFR Part 1910 Subpart N - Materials Handling and Storage
7. 29 CFR Part 1910 Subpart P - Hand and Portable Powered Tools and Other Hand-Held Equipment
8. 29 CFR Part 1910 Subpart Q - Welding, Cutting and Brazing
9. 29 CFR Part 1910 Subpart S – Electrical
10. 29 CFR Part 1910 Subpart T - Commercial Diving Operations
11. 29 CFR Part 1910 Subpart Z - Toxic and Hazardous Substances
12. 29 CFR Part 1926 Subpart E - Personal Protective and Life Saving Equipment
13. 29 CFR Part 1926 Subpart H - Materials Handling, Storage, Use, and Disposal
14. 29 CFR Part 1926 Subpart I - Tools - Hand and Power
15. 29 CFR Part 1926 Subpart J - Welding and Cutting

16. 29 CFR Part 1926 Subpart K – Electrical

17. 29 CFR Part 1926 Subpart L – Scaffolds

18. 29 CFR Part 1926 Subpart M - Fall Protection

19. 29 CFR Part 1926 Subpart P – Excavations

20. 29 CFR Part 1926 Subpart Q - Concrete and Masonry Construction

21. 29 CFR Part 1926 Subpart S - Underground Construction, Caissons, Cofferdams, and Compressed Air

22. 29 CFR Part 1926 Subpart Z - Toxic and Hazardous Substances

23. 29 CFR Part 1926 Subpart AA - Confined Spaces in Construction

24. 29 CFR Part 1926 Subpart CC - Cranes and Derricks in Construction

F. In addition, the Contractor shall adhere to any other applicable Federal, State and Local Safety and Health Regulations involving General industry and/or Construction Standards not mentioned in the Specifications.

G. For trench excavations in excess of five (5) feet in depth, the Contractor shall comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act," the "Trench Safety Act" section of the Quotation, and Section 6.01 "Excavation."

H. The Contractor shall comply with the provisions of Florida Statutes Chapter 556, "Underground Facility Damage Prevention and Safety Act." The Contractor shall contact Sunshine 811 by calling 811 or 1-800-432-4770, or by submitting an internet ticket entry via www.sunshine811.com, at least forty-eight (48) hours prior to any excavation. Failure to familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and the penalties set forth herein.

I. All open excavations made in the earth shall be performed in compliance with OSHA 29 CFR Part 1926 Subpart P - Excavations, and Florida Statutes Chapter 553, Part III, "Trench Safety Act." The Contractor shall appoint a "competent person," in accordance with Subpart P, who shall be present at the job site. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to

employees, and who has authorization to take prompt corrective measures to eliminate them.

1.0.3. SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

A. The Contractor shall at all time provide proper facilities for safe access to the work by authorized government officials.

1.0.4. CONSTRUCTION SAFETY PROGRAM

A. Develop and maintain for the duration of the project, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor's Manual of Safety practices outlining the firms policies on field safety procedures for employees shall be submitted to the Engineer for review before "Notice to Proceeded" will be issued. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.

B. Certain products specified in these specifications contain warnings by the manufacturers that under certain conditions, if instructions for use are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.

C. The duty of the Engineer to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's Safety Supervisor, the safety program, or any safety measures taken in, on, or near the construction site.

1.0.5. SAFETY EQUIPMENT

A. As part of the safety program, maintain at an office or other well-known place at the jobsite, safety equipment applicable to the work as prescribed by the governing safety authorities, all articles necessary for giving first-aid to the injured, and stablish the procedure for the immediate relocation to a hospital or a doctor's care of any person who may be injured on the jobsite.

B. Perform all necessary work to protect all personnel and the general public from hazard, including, but not limited to, surface irregularities or unramped grade changes, and trenches or excavations. Furnish barricades, lanterns, and proper signs to safeguard all persons and work.

C. There shall be no oil dripping from equipment or oil spills.

D. The material shall be stored and handled in a proper and safe manner and upon its use, immediately dispose of the containers, cans, rags, and remnants of the material in a manner approved by the City of Environmental Resources Management at the Contractor's sole cost. The Contractor is not allowed to store empty containers at the site. In case of any violation, the Engineer will report such violation to DERM, and the Contractor shall be subject to all penalties and fines as required by State and County regulations.

E. The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, shoring, logging, machinery guards and the like, shall be in accordance with the applicable governing safety authorities.

F. During construction, construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railings, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards. All such barriers shall have adequate warning lights as necessary, or required, for safety.

1.0.6. STORAGE OF HAZARDOUS MATERIALS

A. The material shall be stored and handled in a proper and safe manner and upon its use, immediately dispose of the containers, cans, rags and remnants of the material in a manner approved by the Department of Environmental Resources Management (DERM) at the Contractor's sole cost. The Contractor is not allowed to store empty containers at the site. In case of any violation, the Engineer will report such violation to DERM and the Contractor shall be subject to all penalties and fines as required by State and County regulations.

B. The Contractor is hereby cautioned that he cannot store any environmentally hazardous materials such as solvents, greases, lubricants or any other type of chemical substances at the Pump Station site. The Contractor shall be allowed to keep only such materials at the site for immediate use.

1.0.7. ACCIDENT REPORTS

A. If death, serious injuries, or series damage are caused, report the accident immediately by telephone or messenger to the Engineer. In addition, the Contractor must promptly report in writing to the Engineer and the City all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

B. If a claim is made by anyone against the Contractor or any Subcontractor on account of any accident, promptly report the facts in writing to the Engineer and the City, giving full details of the claim.

1.0.8. FIRE PREVENTION AND PROTECTION

A. Perform all work in fire-safe manner. Furnish and maintain on the site adequate firefighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

1.0.9. HURRICANE PREPAREDNESS

A. During such periods of time as are designated by the United States Weather Bureau as being a hurricane alert, the Contractor shall perform all precautions as necessary to safeguard the work and property, including the removal of all small equipment and materials from the site, lashing all other equipment and materials to each other and to rigid construction, and any other safety measures as may be directed by the Engineer.

B. During the hurricane season, which runs from June 1st to November 30th, it may become necessary to suspend work due to an impending storm until the proper working conditions prevail. In the event of a tropical storm or hurricane, it is the Contractor's responsibility to secure the jobsite in anticipation of the storm.

C. Fifteen (15) days prior to beginning of construction, the Contractor shall submit to the City or designee a Hurricane Preparedness Plan. The plan shall outline the necessary measures that the Contractor proposes to perform in the event of a tropical storm or hurricane in order to protect all work, materials, and equipment from exposure and properly safeguard all components of the project.

D. Prior to the Start of Work: The Contractor shall submit for approval, a plan of action for the specific actions to be taken on this specific project during a hurricane warning. The Contractor shall ensure operation of the by-pass system, if applicable, during the storm event. Backup power shall be included in case of power failure from FPL, as needed.

E. Upon notification of Hurricane Watch:

1. Formal notification to all Contractors to prepare and submit for approval a Plan of Action for the specific actions to be taken on their particular projects.

F. Upon notification of a Hurricane Warning:

1. Formal notification to the Contractors to implement their approved plan of action to protect the project and the public.

2. For pipeline construction projects within the public right-of-ways, the Contractor will be notified by the Construction Manager Office to suspend his construction operations. The Contractor will backfill all open trenches, remove all construction equipment and materials from the right-of-way, remove unnecessary traffic barricades and signs, secure remaining barricades by "half burial" or "double sandbags".

G. Post Disaster Work: In the event of a disaster declaration by the local or state governing authorities, the City may choose to obtain the services of the Contractor to perform work made an imminent priority for the disaster event. The compensation for the additional work caused by the disaster shall be negotiated between the Engineer and the Contractor with written approval provided by both parties prior to mobilization at the designed location or locations. The value of the work performed shall be up to the original contract with contingencies and dedicated allowances.

1.0.10. JOINT SURVEY TO ESTABLISH AUTHENCITY OF POSSIBLE DAMAGE CLAIMS

A. The Contractor shall maintain vertical and horizontal survey control points on all structures and improvements, located in the vicinity of the work prior to beginning work, and shall periodically check the points for movements with copies provided to the Engineer, of the survey notes for each survey and a copy of the layout of the survey control points.

B. After the contract is awarded and before commencement of work, the Contractor shall perform a thorough examination of existing buildings, structures and other improvements in the vicinity of the work, as applicable, which might be damaged by his operations.

1. Examinations of existing structures, buildings, and other improvements in the vicinity of the work shall be done by the Contractor. The scope of the examination shall include cracks in the structures, settlement, leakage, and similar conditions. The City assumes no responsibility for pre-existing conditions of the structure.

2. Records in triplicate of all observations shall be prepared by the Contractor, photographs shall be taken by the Contractor signed and dated, with descriptive information and in the manner specified above. One signed copy of every

document and photograph will kept on file in the office of the Engineer. Video recording also required.

3. The above records are intended to be used as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the Contractor and the City, and will be a means of determining whether and to what extent damage, resulting from the Contractor's operations, occurred during the Contract work.

C. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such detective pavement exist prior to proceeding with any work in the vicinity. Preconstruction videos and digital pictures shall be taken with date stamps of the entire area of work. A copy of all such notices shall be forwarded to the City.

1.0.11. TRAFFIC – GENERAL

A. Traffic safety and traffic control devices shall be employed on all private and public construction work withing the public right-of-way. Such measures shall be established and provided in conformance with the following regulations and in conformance with the Miami-Dade County Public Works Manual.

B. For construction within the City's public right-of-way, the Contractor shall submit two sets of construction plans for review to the City of Opa-Locka Public Works Department.

C. All traffic control and warning devices so specified shall, unless otherwise specified by the City be furnished, installed according to the Miami-Dade County Public Works Manual, Part I, Standard Details traffic control and safety by an Uniformed Police Officer, when specified, shall by furnished by the Contractor.

D. The Contractor shall take necessary precautions to ensure complete protection to public health, welfare, and safety. Adequate protection and warning devices shall be placed at locations surrounding work areas to prevent injuries to public properties. Particular emphasis must be placed on safety devices for vehicular traffic. Any work areas that may create a hazard at night shall be well lighted form sunset to sunrise with lamps or lanterns visible from all approaches. All maintenance of traffic signals must be approved by the City.

1.0.12. TRAFFIC SAFETY AND ACCESS TO PROPERTY

A. Comply with all rules and regulations of the City, state, and County authorities regarding closing or restricting the use of public streets or highways. No public or

private roads shall be closed, except by express permission of the City and the controlling authority. Conduct the work to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved barricades, signs, and lights where necessary for the safety of the public. The convenience of the general public and residents and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.

B. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained with temporary asphalt that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Access to businesses, schools, and homes along the route of the work shall always be provided by the Contractor.

C. Supply flagmen and guards or Police when they are required by regulation, when deemed necessary for safety, or required by the Engineer. Flagmen and Guards shall be furnished with approved orange wearing apparel and other regulation traffic control devices.

D. The Contractor shall be responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route) traffic control and other provisions, throughout the project as required by the City.

E. Traffic shall be maintained according to corresponding typical traffic control details. No streets shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.

1.0.13. TRAFFIC CONTROL AND USE OF PUBLIC STREETS

A. The Contractor shall be responsible for traffic control as specified hereinafter. Any reference to the City, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas of streets or their departments, published regulations, permits, or data. Abide by all applicable laws, regulations and codes thereof, pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.

B. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control and other provisions, throughout the project as required by the City of Opa-Locka Public Works Department. Traffic shall be maintained according to corresponding typical traffic control details as outlined in the

Miami Dade County Public Works Manual. No street shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.

C. If required by the Traffic Division, employ the required number of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. If required for traffic control permits or agencies, the Contractor shall work odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction.

D. The Contractor shall provide all barricades and/or flashing warning lights necessary to warn motorist of the construction throughout the project.

E. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. Provide necessary access to all adjacent property during construction.

F. The contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Miami Dade County Public Works Manual. In addition, provide for the resetting of all traffic control and information signing removed during the construction period.

G. Where excavations are to be made in the vicinity of signalized intersections, attention is directed to the fact that vehicle loop detectors may have been embedded in the pavement. Verify these locations by inspecting the site of the work and by contacting the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via www.sunshine811.com). Any loop detector which is damaged, whether shown on the plans or not, shall be repaired or replaced to the satisfaction of the Traffic Division.

H. Notify the Traffic Division 24 hours in advance of the construction date, and 48 hours in advance of construction within any signalized intersection.

I. Temporary pavement will be required over all cuts in pavement areas, and also where traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed, and the swale or median area restored to their previous condition.

1.0.14. WORKING IN CONFINED SPACES

A. Where a Contractor needs to work in a confined space, the Contractor must comply with the General Industry, OSHA Confined Space Standard, 29 CFR 1910.146 or the equivalent Confined Space Standard in CFR 1926, Safety and Health Regulations for Construction Standards.

PART 2 PRODUCTS NOT

USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01018 ENVIRONMENTAL CONTAMINATION

PART 1 – GENERAL

1.0.1. ENVIRONMENTAL CONSIDERATINOS

A. For any work conducted in a contaminated area within the project boundaries where hazardous materials or hydrocarbons have been encountered, were previously known to exist, or is suspected by the Contractor or the City Inspector, the Contractor must comply with all applicable requirements of OSHA, EPA, FDEP and Miami-Dade County Regulatory and Environmental Resources Department.

1.0.2. SPECIALIZED CONSTRUCTION AREA

A. Specialized construction areas are defined as areas where contaminants are discovered and require construction by personnel qualified by training and equipped with personal protective equipment for such work.

B. Work in specialized construction areas shall be carried out by personnel qualified by training and equipped for such activities. These personnel shall be either subcontractors with licensing and certification as specialists in this type of construction

or the Contractor's own personnel who have taken and been certified as having passed the required training course(s). Licensing and certifications shall be submitted to the City for verification and shall in all cases be satisfactory to both the City and other authorities with jurisdiction. The Field Health and Safety Technician furnished by the Certified Industrial Hygienist or Environmental Engineer shall be present on the site during all construction in specialized construction areas unless the nature of the work is non-hazardous such that either the Site Specific Health and Safety Plan or the Certified Industrial Hygienist or Environmental Engineer authorizes his absence.

C. Disposal of any contaminated soils and/or groundwater must comply with all applicable federal, state and local requirements.

PART 2 – PRODUCTS

2.0.1. The Engineer of Record shall consult with the City regarding its requirement for material type (including pipe, fitting, gasket, valve interior coating, and the like) to be installed in contaminated areas. **PART 3 – EXECUTION** 3.0.1. INSTALLATION REQUIREMENTS

A. The requirements of this Section shall be closely adhered to in all cases where proposed mains are to be installed in an area of hydrocarbon contamination. These requirements and those imposed by Miami-Dade County Regulatory and Environmental Resources Department or any other agency having jurisdiction an addition to, and take precedence over the City's standard specifications and standard details for ductile iron mains.

B. Contaminated backfill cannot be placed back into an existing trench. Contaminated fill shall be replaced with clean fill, hauled offsite and legally disposed of at a location which can handle the material.

C. The City may require gasketed joints be protected by encasing the entire joint with a hydrocarbon impermeable material. In this case, all joint gaskets shall be protected including those on pipe, fittings, valves, fire hydrants and specialty items.

END OF SECTION

01025 MEASUREMENT AND PAYMENT

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Payment for the various items in the Schedule of Payment items, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, taxes, materials, commissions, transportation and handling, bonds, permit fees, insurance, overhead and profit, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work, all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). Such compensation shall also include payment for any loss or damages arising directly or indirectly from the work.

B. The Contractor's attention is called to the fact that the quotations for the various items of work are intended to establish a total price for completing the work in its entirety. Should the Contractor feel that the cost for any item of work has not been established by the Schedule of Payment items or this Section, it shall include the cost for that

work in some other applicable bid item, so that its proposal for the project does reflect its total price for completing the work in its entirety.

1.0.2. SUBMITTALS

A. Informational:

1. Schedule of Values: Submit schedule on City's form.

2. Application for Payment.

3. Final Application for Payment.

B. Submittals shall be in accordance with Section 01300 “Submittals” and the City’s standards.

1.0.3. SCHEDULE OF VALUES

A. Prepare a schedule of values for the work.

B. Unit Price Work: Reflect unit price quantity and price breakdown from conformed Bid Form.

C. Lump Sum Work:

1. Reflect schedule of values format included in conformed Bid Form.

2. List Bonds and insurance premiums, mobilization, demobilization, facility startup, and contract closeout separately.

D. An unbalanced or front-end loaded schedule will not be acceptable.

E. Summation of the complete schedule of values representing all the work shall equal the Contract Price.

F. The Contractor shall submit a Schedule of Values for review with the return of the executed Agreement to the Owner. The schedule shall contain the installed value of the component parts of work for the purpose of making progress payments during the construction period.

G. The schedule shall be given in sufficient detail for proper identification of work accomplished. The Schedule of Values shall directly correlate to each activity outlined in the construction progress schedule and the construction network analysis (specified in the section entitled “Submittals”) to accurately relate construction progress to the requested payment. Each item shall include its proportional share of all costs including the Contractor's overhead, contingencies and profit. The sum of all scheduled items shall equal the total value of the Contract.

H. If the Contractor anticipates the need for payment for materials stored on the project site or off-site in bonded warehouse, it shall also submit a separate list covering the cost of materials, delivered and unloaded with taxes paid. This list shall also include the installed value of the item with coded reference to the work items in the Schedule of Values. Payment for stored materials shall comply with requirements of General Conditions.

1.0.4. APPLICATION FOR PAYMENT

A. Transmittal Summary Form: Attach one Summary Form with each detailed Application for Payment and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.

B. Use detailed Application for Payment Form provided by the City.

C. Include accepted schedule of values for each portion of work and the unit price breakdown for the work to be paid on unit price basis, and a listing of Owner-selected equipment, if applicable, and allowances, as appropriate.

D. Preparation:
   1. Round values to nearest dollar.

   2. List each Change Order and Written Amendment executed prior to date of submission as separate line item. Totals to equal those shown on the Transmittal Summary Form.

   3. Submit Application for Payment, including a Transmittal Summary Form and detailed Application for Payment Form, a listing of materials on hand as applicable, and such supporting data as may be requested by Owner.

1.0.5. MEASUREMENT—GENERAL

A. Weighing, measuring, and metering devices used to measure quantity of materials for work shall be suitable for purpose intended and conform to tolerances and specifications as specified in National Institute of Standards and Technology, Handbook 44.

B. Whenever pay quantities of material are determined by weight, material shall be weighed on scales furnished by Contractor and certified accurate by state agency responsible. Weight or load slip shall be obtained from weigher and delivered to the City or City's representative at point of delivery of material.

C. If material is shipped by rail, car weights will be accepted provided that actual weight of material only will be paid for and not minimum car weight used for assessing freight tariff, and provided further that car weights will not be acceptable for material to be passed through mixing plants.

D. Vehicles used to haul material being paid for by weight shall be weighed empty daily and at such additional times as required by the City. Each vehicle shall bear a plainly legible identification mark.

E. Materials that are specified for measurement by the cubic yard measured in the vehicle shall be hauled in vehicles of such type and size that actual contents may be readily and accurately determined. Unless all vehicles are of uniform capacity, each vehicle must bear a plainly legible identification mark indicating its water level capacity. Vehicles shall be loaded to at least their water level capacity. Loads hauled in vehicles not meeting above requirements or loads of a quantity less than the capacity of the vehicle, measured after being leveled off as above provided, will be subject to rejection, and no compensation will be allowed for such material.

F. Where measurement of quantities depends on elevation of existing ground, elevations obtained during construction will be compared with those shown on drawings. Variations of 1 foot or less will be ignored, and profiles shown on drawings will be used for determining quantities.

G. Units of measure shown on Bid Form shall be as follows, unless specified otherwise. All methods of measurement shall be approved by the City.

Item	**Method of Measurement**
AC	Acre – Field Measure
CY	Cubic Yard – Field Measure within limits specified or shown, or measured in vehicle by volume, as specified
EA	Each – Field Count
GAL	Gallon – Field Measure
HR	Hour

LB	Pound(s) – Weight Measure by Scale
LF	Linear Foot – Field Measure
LS	Lump Sum – Unit is one; no measurement will be made
SF	Square Foot
SY	Square Yard
TON	Ton – Weight Measure by Scale (2,000)

1.0.6. MEASUREMENT AND PAYMENT

A. General:

1. Payment for all the work completed under this Project shall be made in accordance with the provisions of the "Special Conditions" on the basis of the specific provisions of this section of the Specifications.

2. The Contractor will be paid each month the value of the work completed during the preceding month (less retainage) and the invoiced cost including applicable sales taxes and shipping value (less retainage) of materials not already used, but which have been furnished by the Contractor under the Specifications, provided that such materials have been delivered, properly stored and inspected by the Engineer and that payment therefore has been satisfactorily certified by the Contractor to the Engineer. Remaining cost for materials (less retainage) will be paid at the same time as installation. Any payment for materials which are not used will be withheld from the final payment.

3. The Contractor shall receive and accept the compensation as provided in the Quotation, the ITB and "Invoices and Payments" of the "Special Conditions" as full payment for furnishing all labor, materials, tools and equipment, for performing all operations necessary to complete the work under this Contract, and also in full payment for all loss or damages arising from the nature of the Work, or from the action of the elements or from unforeseen difficulties which may be encountered during the prosecution of the work until the final acceptance by the City.

4. The cost breakdown (or Schedule of Values) referred to herein is defined in "Schedule of Values" of the "Special Conditions." The cost breakdown (Schedule of Values) approved by the Engineer will be used as the basis for making progress payments and for determining the cost of extra work which is the same or similar (as determined by the Engineer) to that defined in the "Schedule of Values."

5. The prices stated in the Quotation includes full compensation for overhead and profit, all costs and expenses for taxes, labor, equipment, furnishing and repairing small tools and ordinary equipment, mobilization, home office expenses and

general supervision, materials, commissions, transportation charges and expenses, patent fees and royalties, bond, insurance, labor for handling materials during inspection, together with any and all other costs and expenses for performing and completing the work as shown on the Plans and specified herein. In addition, the Contractor shall include the actual cost of social security taxes, unemployment insurance, worker's compensation, fringe benefits, inclusive of life and health insurance, union dues, pension, pension plans, vacations, and insurance and contractor's public liability and property damage insurance involved in the work based on the actual wages paid to such labor and all other general costs and profits, prorated to each item.

6. Unless otherwise specifically stated elsewhere herein, the Contractor shall include in the prices bid all materials, electrical supply, fuel, lubricants, temporary equipment, temporary wiring, temporary piping and fittings, pumps, gages, and all other items of whatever nature required to completely test, balance, disinfect if required, and put into fully operational condition all equipment and/or systems supplied by either the City or the Contractor and installed as a part of this Project. Further, any test materials supplied by the Contractor shall be completely satisfactory to the City. Any decision as to whether a particular material is suitable for test purposes shall be at the sole discretion of the Engineer whose decision shall be final. Any material considered not suitable shall be immediately replaced by the Contractor with suitable material and no extra compensation will be allowed."

7. It is the intent of the City to obtain a complete and working installation under this Contract, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

8. For purposes of determining the monthly payments to be made to the Contractor for work accomplished, the value of the work completed shall be determined in the following manner:

    a. Demolition, installation of pipe culvert shall constitute seventy-five percent **(75%)** of the price bid for these Quotation Items.

    b. Submittal of the PSM's daily progress reports and/or field book notes and monthly as-builts of the work that has been performed to date (all documents subject to approval and acceptance by the City) shall constitute ten percent **(10%)** of the price bid for these Quotation Items.

    c. Completion of all sitework restoration, shall constitute five percent **(5%)** of the price bid for these Quotation Items.

d. Submittal of the final as-builts to the satisfaction of the Engineer, completion of all surface repairs, restoration of public or private facilities, appurtenances, and all other work not provided for under other Quotation Items shall constitute the remaining ten percent **(10%)** of the price bid for these Quotation Items.

B. Price Bid:

1. The price bid for each item shall be stated in both words and figures in the appropriate places in the Quotation form. All blank spaces for bid prices must be filled in with ink, or with a typewriter. The Bidder is further directed that any and all alterations, changes, corrections and modifications, made to the Quotation forms prior to submission of bids, must be initialed by the Bidder. Non-compliance by the Bidder of this directive may be grounds for rejection of his bid.

2. In the event that there is a discrepancy between the price written in words and the price written in numbers, the price written in words shall govern except where the number of units multiplied by the unit price shown in numbers equals the total price for that bid item. In such case the unit price shown in numbers shall govern over the unit price shown in words.

3. Where an error is made in the calculation of the total bid price of an item, the unit price shall govern.

4. If the bidder makes an error in his addition of the total bid prices of the applicable items in the Quotation, the correct sum of its applicable bid item totals shall be the Total Bid.

5. It has been determined that the City is not exempt from the payment of Florida State Sales Tax under this Contract. All items of materials, equipment and supplies furnished by the Contractor and remaining a part of the completed Project are subject to this Tax. The Bidder shall include a sufficient amount of money to pay for this Tax in his bid price. Sufficient money to pay the Tax for all miscellaneous materials and minor items shown on the Plans, specified herein, or necessary for the work, and which will remain a part of the completed Project, shall also be included in the price or prices bid, and no other compensation will be provided.

C. Quotation Items:

It is intended that all work required to complete this Project will be included in the various bid items as follows:

Item No. 1

For performing preparatory work and operations in mobilizing for beginning the work of the Project, including preparation and acceptance of Maintenance of Traffic Plan (MOT), but excluding materials and permit costs, both of which are paid under other payment items, shall include, but not be limited to; preparation, submission and acceptance of the MOT, first by the City and if acceptable to the City, submission to and acceptance by all other governing authorities; supply, submission and correction of all "Pre-Approved Product Lists" and/or shop drawings; ordering the said equipment and materials in a timely fashion; those operations necessary for the movement of personnel, equipment, supplies and incidentals to the Project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities; the cost of reestablishing the design baseline, vertical control points and reference points, and establishing proposed pipeline location; the cost of MOT and permit preparation/submission/acceptance; the costs of bonds, required insurance and other preconstruction expense but excluding the actual cost of permits, which are paid under a separate dedicated allowance account and excluding the cost of materials which are paid under another bid item(s).

Not inclusive of the costs incurred in the provision of traffic control and the costs incurred in the provision of off-duty police officers that are to be paid for under separate Bid Items.

The mobilization item will be paid in the following manner:

Contracts with a contract duration of up to and including one hundred twenty (120) calendar days will be paid in two (2) separate payments, each equal to fifty (50) percent of the amount bid for this item.

Contracts with a contract duration of over one hundred twenty (120) calendar days will be paid in four (4) separate payments, each equal to twenty-five (25) percent of the amount bid for this item.

The two or four payments will be made with the first two or four payment draws and is conditioned upon progress satisfactory to the Engineer being made pursuant to the accepted Project.

The total amount of the partial payments may not exceed ten (10) percent of the original Subtotal of the bid items. Any remaining amount will be paid upon completion of all work on the Contract. Retainage, as specified in the "General Covenants and Conditions" and any Special Provisions will apply to these payments.

Since this item is bid as an aggregate sum, payment will be in accordance with the cost breakdown as approved by the Engineer and measured as required by and satisfactory to the Engineer.

Item No. 2

For furnishing and delivering to the City Ultraflo SRASP Barrell Pipe for culverts, or approved equal, of the nominal sizes specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer, which payment shall be full compensation for furnishing Ultraflo SRASP Barrell Pipe, and joint materials; corporation stops pipe bedding; backfill materials; temporary pavement materials; transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Item No. 3

For installing Ultraflo SRASP Barrell Pipe for culverts, or approved equal, of the nominal sizes specified in these bid items will be paid for at the unit price bid times the number of linear feet installed and accepted by the Engineer. The price per foot for installing the pipe shall be full compensation for the completed pipeline, ready for service, and shall include, but not be limited to; exploratory excavation; excavation; sheeting and shoring if necessary; complying with the Florida Statutes "Trench Safety Act"; transporting and unloading the pipe and all other materials not specified in other bid items from delivery trucks at the job site (excavation side) and placing them into position in the trench; installing Ultraflo SRASP Barrell Pipe, installing joint materials; installing joint; removal and disposal of excess or unsuitable fill material, where required; maintaining access to residences and businesses along the route of the main; protecting existing utilities along the route of the culvert; making temporary paving repairs; complying with work hour restrictions; satisfying all requirements of the Project permits; preparation and submittal of PSM's daily progress reports and/or field notes and monthly as-builts of the work that has been performed to date; moving and replacing utilities, fences, trees, landscaping, shrubs, mail boxes, sprinkler systems, shoulders, asphalt paths, curb & gutter, asphalt and plain concrete driveways, traffic separators and all other similar items, to original locations and to equal or better than original conditions; and all other appurtenant and miscellaneous items and work (not included in another bid item) including final cleanup for a complete, satisfactory and functional installation.

Items No. 4

For furnishing and delivering General Guardrail per FDOT index No. 536 with mechanical appurtenances required as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer, which payment shall be full compensation for furnishing General Guardrail per FDOT index No. 536; transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Items No. 5

For installing General Guardrail per FDOT index No. 536 with mechanical appurtenances required as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer, which payment shall be full compensation for furnishing General Guardrail per FDOT index No. 400; transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Items No. 6

For demolishing and removal of the existing Culvert with headwalls as indicated in the plans, will be paid for from the aggregate sum amount established by the Contractor for this purpose. Such amount represents the amount the Contractor feels is necessary to completely demolish the existing concrete stair and chain-link fence and dispose of the debris generated. Asphalt restoration is included in a separate item.

Since this item is bid as an aggregate sum, no other special provisions for measurement will be necessary.

Item No. 7

For excavating of existing backfill material at existing Culvert location, will be paid for at the unit price bid times the number of cubic yards removed to the satisfaction of the Engineer, and includes removal of unsuitable material, loading, hauling, legal disposal off-site and tipping fees.

Item No. 8

For providing bypass pumping, as needed, to ensure Canal flow is uninterrupted throughout construction, will be paid for from the aggregate sum amount established by the Contractor for this purpose. Such amount represents the

amount the Contractor feels is necessary to completely ensure Canal flow is uninterrupted throughout construction.

Since this item is bid as an aggregate sum, no other special provisions for measurement will be necessary.

Item No. 9

For furnishing and delivering all necessary Turbidity Barriers for erosion control measures specified on plans, as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer for this purpose, which payment shall be full compensation for furnishing and installing all necessary Turbidity Barriers for erosion control measures specified on plans, transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Item No. 10

For furnishing and delivering all necessary Drop Inlet Sediment Protections for erosion control measures specified on plans, as specified in these bid items will be paid at the unit price bid times the number of linear feet accepted by the Engineer for this purpose, which payment shall be full compensation for furnishing and installing all necessary Drop Inlet Sediment Protections for erosion control measures specified on plans, transportation and handling costs delivered ditchside; all shop drawing preparation and correction cost for material furnished under this item; all material and equipment required to clean the item; and all other appurtenant and miscellaneous items (not included in another bid item) required for a complete and satisfactory installation.

Item No. 11

For selling and delivering concrete for the installation of 8-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, will be paid for at the unit price bid times the number of cubic yards of concrete placed. The price shall be full compensation for furnishing concrete for the installation of 8-inch thick Concrete Pavement (min. 3,000 psi at 28-day), transportation and handling costs delivered ditchside. This bid item shall be used only at locations approved by the Engineer or indicated in the Plans where the minimum cover over the main cannot be obtained.

Item No. 12

For constructing 8-inch Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, will be paid for at the unit price bid times the number of cubic yards

of concrete placed. The price shall be full compensation for all work including furnishing all labor, equipment, and materials required for constructing the 8-inch Concrete Pavement. This bid item shall be used only at locations approved by the Engineer or indicated in the Plans where the minimum cover over the main cannot be obtained.

Item No. 13

For constructing concrete 4-inch-thick sidewalk and ramp curbing to match existing per FDOT index No. 310, will be paid for at the unit price bid times the number of square feet of such sidewalk required, installed and accepted by the Engineer, and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete installation.

Item No. 14

For constructing concrete curb and gutter restoration to match existing as per FDOT index No. 300, will be paid for at the unit price bid times the number of square feet of such curb and gutter required and placed as measured along the curb, installed where directed by the Engineer, and the price bid shall be full compensation for furnishing all labor and equipment for a complete installation.

Item No. 15 - Contingent Item

For furnishing and installing additional suitable backfill material, will be paid for at the unit price bid times the number of cubic yards of additional trench backfill furnished and installed as directed by the Engineer in the field and includes removal of unsuitable material, loading, hauling, legal disposal off-site and tipping fees. The additional trench backfill shall be measured along the main within the limits of the trench as defined by the County's Standard Details appended hereto. The use of additional trench backfill shall be paid for only when and where approved by the Engineer prior to installation.

Item No. 16

For furnishing and installing rubble (Broken Stone), including necessary geotextile filter fabric, at Culvert embankment for the rip-rap installation as per FDOT Standard Specifications Manual Section No. 530, will be paid for at the unit price bid times the number of tons of such rip-rap required as directed by the Engineer in the field and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete installation.

Item No. 17

For furnishing and installing sand-cement bags at Culvert embankment for the riprap installation as per FDOT index No. 530, will be paid for at the unit price bid times the number of Cubic Yards of such rip-rap required as directed by the

Engineer in the field and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete installation.

Item No. 18

For furnishing and constructing concrete endwalls at Culvert pipe barrels per FDOT index No. 430-032, will be paid for at the unit price bid times the number of cubic yards of concrete placed. The price shall be full compensation for all work including furnishing all labor, equipment, and materials required for constructing the concrete enwall at Culvert pipe.

Item No. 19

For furnishing and constructing concrete shoulder barrier as per FDOT index No. 521-001, will be paid for at the unit price bid times the number of linear feet of shoulder barrier installed, as indicated in plans. The price shall be full compensation for all work including furnishing all labor, equipment, and materials required for constructing the concrete shoulder barrier.

Item No. 20

For cold milling roadway surface course for permanent pavement repairs (nominal 1 inch thick), will be paid for at the unit price bid times the number of square yards of such surface course milled and required as measured along the curb within the limits defined by details on the Plans and/or the City's Public Works Manual appended hereto and as approved by the Engineer. Greater widths are at the Contractor's option and expense. The price bid shall be full compensation for furnishing all materials, labor and equipment required for milling of surfaces indicated. Asphalt cold milling shall be performed using an automated pavement planer capable of maintaining an accurate depth. Cold milling equipment shall meet the approval of the Engineer and the governing agency having jurisdiction at the location of the pavement milling operation. The Engineer's word as to the acceptability of the equipment shall be final.

Item No. 21

For constructing **Type "V"** permanent pavement repairs for roadway (nominal 1 inch thick machine-laid asphaltic concrete friction surface overlay) will be paid for at the unit price bid times the number of square yards of overlay, installed where directed by and to the satisfaction of the Engineer, which price shall be full compensation for furnishing all labor, material, and equipment for a complete installation; and shall include asphalt pavement driveways in roadways, as required and directed by the Engineer. After the pavement has been milled and the existing pavement removed, a tack coat shall be applied as specified above. The latest applicable standard for the friction course from the governing authority shall be used. Temporary pavement markings for roadways shall be included in this bid item.

Item No. 22

For replacing pavement markings damaged, removed or obliterated by Contractor's operation, will be paid for from the unit price bid times the number of pavement markings for this purpose. Such amounts represent the amount the contractor feels is necessary to comply with the governing agency's requirements. Any portion of this fund, remaining after the work has been paid for will remain with the Contractor. Conversely, no requests for additional reimbursement will be approved. Reflective Pavement Markers shall also be furnished and installed under this item and there will be no additional compensation paid for this work.

Since this item is bid as an aggregate sum, no other special provisions for measurement will be necessary.

Item No. 23 - Contingent Item

For restoring sodded areas, will be paid at the unit price bid times the number of square yards of sod placed, and the price bid shall be full compensation for furnishing all labor, materials and equipment for a complete restoration.

Item No. 24

For furnishing traffic control, will be paid for from the aggregate sum amount established by the Contractor for this purpose. Such amount represents the amount the Contractor feels is necessary to provide sufficient flagmen, signs, barricades, and similar items and work for directing traffic and maintaining safety during all times of work and other times as directed by the Engineer, FDOT, the municipalities' Public Works Department and any other governing authority. Any portion of this fund remaining after all authorized payments have been made will remain with the Contractor. Conversely, no requests for additional payments will be approved.

Payment to the Contractor under this item will be by monthly percentage corresponding to the percentage of the Project's work items completed and paid for each month, as approved by the Engineer.

Item No. 25 - Contingent Item

For sheeting and shoring ordered left in place by the Engineer, will be paid for at the unit price bid per square foot, measured from tip to cut-off times the horizontal length, regardless of thickness, times the number of linear feet of sheeting and shoring left in place as accepted by the Engineer. Payment shall be full compensation for cutting off and for all salvage and potential reuse value of the material. Sheeting and shoring left in place without the Engineer's approval will be at the Contractor's expense.

Item No. 26- Contingent Item

For removal, transport, and legal disposal of unsuitable backfill materials, including tipping fees, will be paid for at the unit price bid times the number of cubic yards removed and legally disposed of, as measured by the truckload to the satisfaction of the Engineer.

Item No. 27 – SUBTOTAL

Sum of Item Nos. 1 through 27.

Item No. 28 - Dedicated Allowance

This item establishes a fund for reimbursement of the cost of providing off-duty police officers as required for this project. Payment shall only reimburse the Contractor for the cost of the off-duty police officers for hours on duty at the work site; no overhead, travel time or other additional costs will be allowed. Any portion of this fund remaining after all authorized payments have been made will be withheld from contract payment and will remain with the City.

Item No. 29 - Dedicated Allowance

This item establishes a fund for reimbursement of the cost of all required construction permits and fees, if authorized by the Engineer. Payment shall reimburse the Contractor for only the cost of the construction permit and fee. Any question or whether a construction permit or fee is required shall be decided by the Engineer whose word shall be final. Any portion of this fund remaining after all authorized payments have been made will be withheld from Project payments and will remain with the City.

Item No. 30 - Contingency Allowance

For unforeseen conditions, minor construction changes and Quantity Adjustments, additional work not covered by other items, if ordered by the Engineer.

This account is for all labor, materials, equipment and services necessary for modification or extra work required to complete the Project due to unforeseen conditions, unforeseen conflicts between existing elements of work and the proposed work; for minor changes required to resolve any unforeseen conditions, Revised Regulations, Technological and Products Development, Operational Changes, Schedule Requirements, Program Interface, Emergencies and other Miscellaneous Costs; and for adjustments to estimated quantities shown on the unit prices of the Quotation to conform to actual quantities installed; and associated time related to this work only if ordered by the Engineer.

Payment to the Contractor under the Contingency Allowance will only be made for work ordered in writing by the Engineer, in accordance with Section 13 "Extra Work and Payment Therefore" of the "General Covenants and Conditions." Any portion

of these accounts remaining after all authorized payments have been made will be withheld from Contract payments and will remain with the City.

A non-compensable time extension shall be included in the Contingency Allowance work when approved by the Engineer.

Item No. 31 - TOTAL BID

Sum of Item Nos. 27, 28, 29 and 30.

Note:

Since Item Nos. 15, 23, 25 and 26 are Contingent Items, and because of the nature of the Dedicated Allowance, Item Nos. 28 and 29, and the Contingency Allowance, Item No. 30, they may or may not be used at the option of the City. Any overrun or under run provisions contained within the Project Documents shall not be applicable to these items.

1.0.7. NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

A. Payment will not be made for following:

1. Loading, hauling, and disposing of rejected material.

2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.

3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.

4. Material not unloaded from transporting vehicle.

5. Defective work not accepted by Owner. Material remaining on hand after completion of work.

1.0.8. PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

A. Partial Payment: No partial payments will be made for materials and equipment delivered or stored unless shop drawings or preliminary operation and maintenance manuals are acceptable to the Engineer.

B. Final Payment: Will be made only for products incorporated in work; remaining products, for which partial payments have been made, shall revert to Contractor

unless otherwise agreed, and partial payments made for those items will be deducted from final payment.

1.0.9. ALLOWANCES

A. The allowances shall be used only at the discretion of and as ordered by the Owner for such items as unforeseen conditions, unforeseeable conflicts between existing elements of work and the proposed work, unit price items exceed estimated quantities, and any associated work requested by the Owner including all labor, materials, and services for modifications or extra work to complete the project that was anticipated, but not specifically included in this Contract.

B. Any portion of these allowances that remain after all authorized payments have been made will be withheld from contract payments and will remain with the Owner.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01031 GRADES, LINES AND LEVELS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The work of this Section comprises the establishing of grades, lines and levels.

1.0.2. RELATED WORK

A. Section 01720 “Project Record Documents”

PART 2 – PRODUCTS

2.0.1. MATERIALS

A. Furnish all stakes, templates and other materials necessary for establishing and maintaining of the lines and grades necessary for control and construction of the work and all incidental labor necessary for the prosecution of the work. **PART 3 – EXECUTION**

3.0.1. LAYOUT OF THE WORK

A. GENERAL

1. The Engineer of Record, through retaining the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida, shall furnish the Contractor with horizontal and vertical controls which shall be utilized as specified elsewhere herein to layout the work. The Professional Land Surveyor and Mapper, who is licensed in the State of Florida hired by the Contractor, shall verify all controls provided by the Engineer of Record and it shall be the responsibility of the Contractor to preserve same.

2. The Contractor shall retain the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida who, shall furnish and set stakes, establishing line and grade and shall solely be responsible for the layout of the work as well as the recording of all as-built dimensions and elevations. The Contractor shall furnish all additional stakes, templates, and other materials for marking and maintaining survey points and lines given, and shall be responsible for their preservation. Should any of the horizontal and vertical control points set by the Engineer of Record be destroyed or disturbed, they shall be reset by the Contractor's Florida Registered Land Surveyor and Mapper, at the Contractor's expense. All control points previously set by the Engineer of Record shall be verified by the Contractor's surveyor.

B. LAYOUT

As provided in Subsection 3.01-A, above, the Contractor through the services of his Florida Registered Land Surveyor and Mapper, shall establish the line and bench mark and other reference points for the pipeline or structure, as follows:

1. Structures: Will consist of baselines, stakes at building corners, centers and centerlines, auxiliary lines and two bench marks from which to establish the

elevations. The Engineer of Record shall set a minimum of three horizontal and vertical control points which shall thereafter be maintained by the Contractor, without further help from the Engineer of Record, for use in establishing and checking the lines and grades as shown on the contract drawings.

2. Pipelines: Will consist of baselines, construction lines, centerlines, auxiliary lines and bench marks from which to establish the elevations. The Engineer of Record shall set horizontal and vertical control points at the beginning and end of the work and at a minimum distance of 1,400 ft. in between. When the total distance is less than 1,400 ft. control points shall be set at the beginning and end of the work.

3. The Contractor shall use this information to construct the structures and pipelines to the lines and grades shown on the project drawings and shall supply all equipment and personnel necessary to accomplish this end.

4. For pipelines, this will consist of establishing all points of bend (but not necessarily bevel pipe unless in close proximity to other facilities), valves, tees, crosses and other stations not more than 100 feet apart along the proposed centerline of the pipe, or along a stationed offset line as shown on the plans, marked by a nail in a metal cap if in pavement, with the station painted nearby or by a nail in the top of a wooden stake driven flush with the ground with the station marked on the flag stake nearby, if not in pavement.

5. The Contractor shall supply the City Inspector with a copy of the Florida Registered Land Surveyor and Mapper's layout of the work immediately upon its availability to his own forces.

6. The Contractor shall make his equipment and men available to the Inspector for spot checking the accuracy of the pipe laying. The Inspector shall require the Contractor to correct pipe alignment when necessary.

C. RECORD DRAWINGS:

1. During the entire construction operation, the Contractor shall retain the services of a State of Florida Registered Land Surveyor and Mapper who shall maintain records of the installation, including all deviations from the plans and specifications by obtaining "as-built" dimensions and elevations.

2. The Surveyor shall prepare Record As-Built Drawings showing correctly and accurately all changes and deviations made during construction, including approved construction variances, to reflect the work as it was actually constructed.

3. Refer to Sections 01720 and 01725 for City's criteria for developing project record documents and record As-Built drawings.

D. HORIZONTAL AND VERTICAL CONTROL FOR DESIGN

The following shall apply when establishing horizontal and vertical controls for design. They shall also be used for the development of construction drawings.

1. Survey stationing shall proceed from south to north and/or from west to east.

2. Baseline or centerline shall be tied to section corners, or to monument lines or to right of-way lines.

3. Points along the survey line shall be referenced to perpetuate the alignment. Whenever possible, the reference points shall be established at right angles to the survey line and at intervals no longer than 1,400 feet. Reference points shall be shown on construction plans.

4. Centerline of side streets shall be established and set by nail and disc. Station and angle turned shall be given and shown on the plans.

5. All curve data (horizontal) shall be shown on plans. Point of curvature and point of tangency shall be set in the field, reference P.C. and P.T. or P.I.

6. Easement lines shall be tied to baseline or centerline. Give station and angle turned.

7. Set centerline or baseline stations every 100 feet on the ground using iron rods in unpaved areas or P.K. nails on asphalt.

8. All vertical control and elevations shall be referenced to North American Vertical Datum of 1988 (NAVD 1988).

9. Temporary bench marks (T.B.M.) and bench marks shall be established throughout the project at approximately 1,000 feet intervals. Show information on plans.

10. Centerline shall be tied to baseline if different from each other.

11. Tie proposed pipe to centerline or baseline, not to right-of-way line. Right-of-way line shall be tied to centerline or baseline.

12. All survey information shall be shown on the plans.

13. All point of intersections and deflection angles shall also be shown. Angle can be submitted by bearings.

END OF SECTION

01070 ABBREVIATIONS

PART 1 - GENERAL

1.0.1. SCOPE OF WORK

A. Comply wherever in these specifications' references are made to the standards, specifications, or other published data of the various national, regional, or local organizations, such organizations may be referred to by their acronym or abbreviation only. As a guide to the user of these specifications, the following acronyms or abbreviations which may appear in these specifications shall have the meanings indicated herein.

B. It is the intent of the City to obtain a complete functional, and satisfactory installation under this Contract, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.0.2. ABBREVIATIONS AND ACRONYMS

A. The Contractor is also alerted that various "Standards" are used herein for reference and criteria, and that he should obtain copies for his general use and protection. Abbreviated titles are used throughout these Specifications and although most of them are widely known, their complete titles are given below in order to avoid any misunderstanding.

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute, Inc.
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association

FAC	Florida Administrative Code
FBC	Florida Building Code
FDOH	Florida Department of Health in Miami-Dade County
FDOT	State of Florida Department of Transportation
MDDTPW	Miami-Dade Department of Transportation and Public Works
NSF	NSF International
OSHA	Occupational Safety and Health Administration

B. The above list shall not be considered complete, as there are other "Standards" used; however, in most cases complete titles have been given.

C. Wherever "Standards" are indicated herein for reference, the referenced portion shall have the same force and effect as if it were included, herein, in its entirety, latest revision if the date of publication is not shown.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01090 REFERENCE STANDARDS

PART 1 – GENERAL

1.0.1. REFERENCE STANDARDS

A. Comply with the requirements of standard with date as specified herein. Standards without dates shall be understood as the Standard current at the time of bid. In case of conflict between the referenced standards, the one having the more stringent requirements shall govern.

B. In case of conflict between the referenced standards and the Project Documents, the Project Documents shall govern.

C. When no reference is made to a code, standard, or specification, the standard specifications of the ASTM, the ANSI, the ASME, the IEEE, or the NEMA shall govern.

1.0.2. QUALITY ASSURANCE

A. Application: When a standard is specified by reference, comply with requirements and recommendations stated in that standard, except when requirements are modified by the Contract Documents or applicable codes establish stricter standards.

1.0.3 ABREVIATIONS

A. Abbreviated titles for other governing standards are used throughout these specifications and although most of them are widely known, their complete titles are given below to avoid misunderstanding.

1. AA: Aluminum Association.

2. AAMA: Architectural Aluminum Manufacturer's Association.

3. AASHTO: American Association of the State Highway and Transportation Officials.

4. ACI: American Concrete Institute.

5. ACPA: American Concrete Pipe Association
6. AI: Asphalt Institute
7. AIA: American Institute of Architects AISC American Institute of Steel Construction
8. AISI: American Iron and Steel Institute
9. AITC: American Institute of Timber Construction
10. ANSI: American National Standards Institute, Inc.
11. API: American Petroleum Institute
12. ASCE: American Society of Civil Engineers
13. ASME: American Society of Mechanical Engineers
14. ASMM: Architectural Sheet Metal Manual
15. ASSE: American Society of Sanitary Engineers
16. ASTM: American Society for Testing and Materials
17. AWS: American Welding Society
18. AWWA: American Water Works Association
19. BHMA: Builders Hardware Manufacturer's Association
20. CIPRA: Cast Iron Pipe Research Association
21. CLFMI: Chain Link Fence Manufacturers Institute
22. CMA: Concrete Masonry Association
23. DIPRA: Ductile Iron Pipe Research Association
24. ETL: Environmental Test Laboratories

25. FDEP: Florida Department of Environmental Protection

26. FDOT: Florida Department of Transportation

27. IEEE: Institute of Electrical and Electronics Engineers

28. NBS: National Bureau of Standards

29. NEC: National Electrical Code

30. NEMA: National Electrical Manufacturer's Association

31. NFPA: National Fire Protection Association

32. OSHA: Occupational Safety and Health Administration

33. SSPC: Steel Structures Painting Council

34. SSPWC: Standard Specifications for Public Works Construction

35. SFWMD: South Florida Water Management District

36. UL Underwriters Laboratories, Inc.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01100 SPECIAL PROJECT REQUIREMENTS

PART 1 – GENERAL

1.0.1. RESPONSIBILITY OF THE CONTRACTOR

A. The Contractor shall have at all times as his agent on the site of the work a competent superintendent capable of reading and thoroughly understanding the plans and specifications.

B. The Contractor shall be responsible for the good condition of the work or materials until formal release from his obligations under the guidelines of this project. The Contractor shall store materials and shall be responsible for and shall maintain partly or wholly finished work during the continuance of the Contract. The Contractor shall place sufficient lights and danger signals on or near the work from sunset to sunrise; shall erect suitable railings or other protective devices about unfinished work, open trenches, embankments, or other obstructions; shall provide all necessary watchmen on the work by day or by night for the safety of the public and shall take all necessary precautions for preventing accidents or injuries to persons or property in or about the work.

C. The Contractor shall be responsible for the coordination, location, and relocation of utilities, including but not limited to utility light poles, cables, fiber optic lines, water

mains and services, sewer mains and services, electrical, telephone and television cables, signals and signal poles, fences, guard rails, piping, culverts, conduits and drains that interfere with the positioning of the work as set out on the drawings. The cost of all such coordination and relocations shall be included in the bid for the project and shall not result in any additional cost to the City.

D. Prior to proceeding with trench excavation, the Contractor shall contact all utility companies and all other users of the right-of-way in the area to aid in locating their underground services. It shall be the Contractor's responsibility to contact utility companies at least three NORMAL WORKING DAYs before starting construction. The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground utilities may be determined.

E. Wherever piping systems or utilities such as water, wastewater, air, chemical, electrical or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the drawings. Approximate locations of known installations in the vicinity of new work must be verified in the field by the Contractor, who shall uncover them carefully, prior to commencement of the work.

F. The Contractor shall be familiar with all codes and regulations of the Federal Government, the State of Florida, Miami Dade County, the City of Opa-Locka and any municipal corporations applicable to every aspect of the project. The Contractor shall provide all materials and shall perform all work necessary to fully comply with all provisions and requirements of applicable codes and regulations whether specifically indicated in the plans and specifications or not. It is the intent of the City to obtain a finished project in full compliance with all requirements of any agencies having jurisdiction over any portion of the work involved in the project. The Inspector will not recommend acceptance of the work until all requirements and provisions of pertinent codes and regulations have been satisfactorily fulfilled.

G. Changing the grade of the proposed main by rising deflections, or the alignment by horizontal deflections, will not be considered as extra work, or extra cost, to the Contractor, and in some cases a credit to the City may be warranted.

H. Any Conflicts between the field investigation and the information shown on the plans shall be brought to the immediate attention of the Engineer.

1.0.2. LAND FOR CONSTRUCTION PURPOSES

A. The Contractor shall limit operations, temporary facilities and storage of equipment and materials to on-site areas to be designed by the Engineer.

B. Should the Contractor require additional space he/she shall make his own arrangements for storage of materials and equipment in locations off the construction site. For the allocated space, submit to the Engineer for approval, proposed plan and layout for all temporary facilities, offices, storage facilities, temporary water service and distribution, and temporary power service and distribution. Prior to commencing any new construction remove, relocate and protect where necessary all existing underground and above ground facilities, pipelines, utility systems, plantings and all other existing installations. All of these existing features shall be restored to their initial or better than initial conditions.

1.0.3. PRE – CONSTRUCTION CONFERENCE

A. After the Award of Contract and prior to the issuance of the "Notice to Proceed," a preconstruction conference will be held with the Contractor, the City, various utility companies and others who are interested in the Project for the purpose of coordinating the work. The time and place of meeting will be set by the Engineer.

B. In some cases the preconstruction conference may be held after the start work date stated in the written "Notice to Proceed." This may be due to difficulty with coordination of all parties concerned, or other similar reasons.

C. Such delays in holding the preconstruction meeting will not relieve the Contractor of any responsibilities hereunder, and will not be an acceptable reason for him to request additional work completion time beyond that provided since he can be obtaining permits, mobilizing his equipment and forces, ordering materials, performing minor work, or other work if approved by the Engineer, during the interim period.

D. Prior to the preconstruction conference, the Contractor shall prepare the construction schedule as described in Section 01120 - Sequence of Construction and General Information and Section 01200 - Project Meetings, "Project Scheduling" and provide copies of the same to others in attendance.

E. The construction schedule shall include the place of beginning, the proposed order of progression, together with the estimated times for beginning and completing the various items of work. In addition, the Contractor shall prepare on electronic media, a critical path method (CPM) with emphasis made to "construction time and completion."

F. The Engineer will discuss requirements of such matters as project supervision and inspections, progress schedules and reports, Contract Change Orders, insurance, safety, and other items pertinent to the Project.

G. All parties to this conference should be prepared to discuss any problems anticipated with the execution of the work under this Contract.

1.0.4 SAFETY REQUIREMENTS

A. The Contractor shall comply with the Department of Labor Safety & Health Regulations for construction promulgated under the Occupational Safety & Health Act of 1970, (PL 91-596).

B. Comply with all applicable provisions of the Occupational Safety and Health Act (OSHA). The Contractor's Manual of Safety Practices, dealing with the firm's policies on field safety procedures for employees shall be submitted to the Engineer for review before Notice to proceed will be issued.

C. Conduct operations in such a manner, utilizing warning devices, such as traffic cones, barricades and warning lights, that traffic and pedestrians are given adequate warning of hazard of the work site as may be deemed necessary by the City and/or the Engineer.

D. Certain products specified in these specifications contain warnings by the manufacturer that under certain conditions, if instructions for use of the product are no followed, a hazardous condition may develop. It is the Contractor's responsibility to instruct its workmen in the safe use of the product, or any product substitution.

E. For trench excavations in excess of five feet in depth, the Contractor shall comply with the provisions of the State of Florida "Trench Safety Act".

F. The contactor shall be familiar with the "Underground Facility Damage Prevention and safety Act", Florida Statute 556. The Contractor shall contact the Sunshine State One Call Center of Florida.

G. Do not store any environmentally hazardous materials such as solvent, greases, lubricants or any other type of chemical substances at the work sit. The Contractor is permitted to keep such materials at the site as are for immediate use only. Do not store any empty container at the site.

1.0.5 PIPE AND EXISTING UTILITIES

A. The underground utilities, structures and other facilities shown on the plans are located according to the best information available but may vary by several feet from both the position and elevation shown. The Contractor shall explore far enough in advance of his main trench to determine the exact location and condition of such utilities, structures or facilities so that, before the pipe is installed, the Engineer may change the line or grade of the pipe, should that become necessary to avoid a conflict.

B. In all cases where the main is deflected either horizontally or vertically, and the Engineer requires additional work and items such as paving and similar items for which a pay item was established in the quotation, then such additional work and items will be paid for at the prices bid. Wider trench widths may be paid with the approval of the Engineer.

C. The Contractor shall determine the locations of recent additions to the systems not shown on the plans. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from his activities. The location of all overhead utilities shall be verified, and the Engineer notified of any conflict which might occur. The Contractor shall be responsible for determining which poles will need shoring during excavation and shall provide such shoring and support as is required.

1.0.6 MATERIALS AND EQUIPMENT FURNISHED BY THE CITY

A. No material or equipment will be furnished by the City under this Contract. All material, labor and equipment necessary for completion of the work shall be furnished and installed by the Contractor, whether or not shown on the Plans or specifically mentioned in the Specifications.

1.0.7 WATER USED IN CONSTRUCTION

A. The City will furnish water at a charge for all construction activities unless otherwise specifically made an exception in the project specifications or specifically made an exception by the Engineer in writing.

B. Consumption for the following activities shall be determined by City personnel who shall be provided with a minimum of seventy-two (72) hour advance notification. Failure of the Contractor to provide advance notification and/or have City personnel on site to witness and verify consumption for the following activities could result in his being fined and/or a citation being issued against him in accordance with the Rules and Regulations of the City's Tampering Section.

1. Pigging:

2. Flushing, only if and when approved by the Engineer:

3. Chlorination, if applicable:

4. To fill mains being pressure tested, excluding make-up water during test: and

5. When and where directed or approved by the Engineer.

Water for construction activities listed above will be furnished from adjacent Cityowned water mains or the most convenient water source. In instances where no City-owned source of water is available, the Contractor shall make his own arrangements with the municipality or other controlling authority and include the cost of all water required during construction in his overall construction cost. No reimbursement will be made.

C. Water used in construction for purposes other than those listed above, including makeup water pumped into the pipe during hydrostatic testing, will be furnished by the City at a charge. This water will be supplied from the most convenient source through the existing piping. However, all water used must be metered through a City meter. The Contractor will be billed by the City based on water usage recorded by the floating meter.

D. When the project is occurring in the City of Opa-Locka, the Contractor shall present to the City, the Fire Department Permit during application with the New Business Office.

E. All piping, fittings, valves and equipment, including pumps and power, required for handling the water shall be furnished by the Contractor. Care shall be exercised in the use of the water and provision shall be made to protect the water supply for contamination and indiscriminate use by unauthorized persons. The Contractor shall use only potable water unless otherwise specifically called out elsewhere herein and then only in the case of sewage force mains, reclaimed water mains or raw water mains.

F. Under no circumstance shall the Contractor utilize a water source, including existing piping, until such source or piping has been approved for use by the City.

1.0.8 MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR

The general requirements specified herein shall apply to all items of materials and equipment in addition to the Specifications for individual items appearing in the following sections:

A. All materials and equipment furnished by the Contractor for use in the work shall be new and of recent domestic manufacture, and shall be the products of reliable manufacturers who, unless otherwise specified, have been regularly engaged in the manufacture of such material and equipment for at least five (5) years. All components shall, wherever possible, be standard stock articles of well-known domestic manufacturers. Where the plans and specifications designate the product of a particular manufacturer, the product specified has been found suitable for the intended use, but, unless otherwise provided, articles or products of similar characteristics may be offered for the approval of the Engineer. A minimum of six copies (more if so

required herein) of complete descriptive data shall be furnished regarding all articles furnished by the Contractor. The descriptive data shall consist of dimension drawings, catalog references and other information necessary to clearly identify each article. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense and shall be solely responsible for all cost and time required by any difference in construction methods, fabrication or assembly required and no additional time will be allowed. Any repermitting together with all costs and work associated therewith shall be performed by the Contractor and no additional compensation will be allowed.

B. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense. Said engineering design services shall be of an extent satisfactory to the Engineer whose word shall be final and shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.
C. All water system components shall be in full compliance with NSF/ANSI 61, "Drinking Water System Components - Health Effects," latest revision.

D. The Contractor shall also supply certification that all materials supplied that will come into contact with drinking water conform or will conform with NSF/ANSI 61.

E. The Contractor shall care for and protect against loss or damage all material and equipment to be incorporated in the construction, whether furnished by him/her or by the City, for the duration of the Contract, and shall repair or replace any lost or damaged items. The Contractor shall be relieved of such responsibility only upon final acceptance of all of the work by the Engineer.

F. No material shall be stored so that it is in direct contact with the ground. All metal shall be thoroughly cleaned before being placed in the work. Storage and protection measures shall be subject to approval of the Engineer whose decision shall be final. The Contractor shall immediately protect materials by different methods, materials or to a greater extent if so, directed by the Engineer in the field.

G. Unless otherwise specified or noted on the plans, all steel bolts, nuts, washers, eye bolts, tie rods and all other miscellaneous ferrous metal items shall be American made stainless steel.

H. The Contractor shall have available sufficient tools and equipment to properly perform his work in all areas of the system, including easements or other areas with limited or restricted access or clearances. The Contractor is specifically advised that work in easement may require specialized equipment to satisfactorily perform the work and the capability to accomplish these installations is a requirement of these specifications.

I. Any salvageable pipe, fitting, or other miscellaneous material or equipment, removed during construction and not reused in the work shall be cleaned, hauled to and stored by the Contractor at his expense, where directed by the Engineer, and shall remain the property of the City. All other material and equipment shall be disposed of by the Contractor at his own expense.

J. To ensure satisfactory and successful final painting of materials and equipment to be furnished, it is essential that the paints applied in the shop and in the field be mutually compatible. To this end, the Contractor shall require that the shop paints be applied to materials and equipment be compatible with the paints he proposes to use in the field or shall determine what shop paints have been used and select field paints compatible therewith, all as approved by the Engineer.

K. The Contractor shall furnish the City, with one set of any special tools required for servicing for each type of equipment actually furnished. These tools shall be delivered to the office of the City's Construction Manager, City of Opa-Locka Public Works. A letter of transmittal shall be provided, containing a list of all items being provided.

L. All other material required to complete this project shall be furnished and installed by the Contractor, whether or not shown on the plans or specifically mentioned in the specifications.

M. The Contractor shall procure extended manufacturer's warranties on equipment furnished by him. These warranties shall be kept in force and extended such that the City will be provided a manufacturer's warranty with at least one year to run beyond the date of final acceptance of the project. A copy of the warranty with these provisions clearly stated or with an attached letter of certification from the manufacturer to this effect shall be delivered with the equipment and no payment or partial payment for said equipment will be made until such warranty/certification is delivered to the Engineer.

1. The warranty shall specifically cover the case where the equipment warranted has been replaced by a newer model. In such instance the warranty shall either provide spare parts and service to repair or replace in its entirety the original model, or in lieu of this; provide a complete new model unit to replace the warranted and failing equipment. Should the failing equipment be replaced by a new model, the Contractor shall be responsible for making all necessary changes to adjacent and/or connected equipment at no extra cost to the City and to the satisfaction of the Engineer whose decision shall be final.

2. As a part of final inspection, the Contractor shall deliver to the City in a form satisfactory to the Engineer, either warranties or certifications of warranty

extensions showing the warranties to be in effect at least one year beyond the planned date of final acceptance.

3. All costs for procuring, maintaining and extending these warranties shall remain with the Contractor, even in cases where the contract construction time for completion has been extended. These costs shall be included in the Contractor's bid price and no further compensation will be allowed.

4. In instances, where the City puts an item of equipment into full productive service prior to final acceptance, the warranty shall still be extended to at least one year past final acceptance. However, the City will reimburse the Contractor for the prorated cost of the extended warranty from the time when the equipment was placed in full productive service to the date of final acceptance based upon the manufacturer's invoice to the Contractor for this cost. Only the warranty cost will be reimbursed, no overhead or other costs will be allowed.

N. Extended Warranties:

1. The Contractor shall procure extended manufacturer's warrantees on equipment furnished by him. These warrantees shall be kept in force and extended such that the City will be provided a manufacturer's warrantee with at least one (1) year to run beyond the date of final acceptance of the Project. A copy of the warrantee with these provisions clearly stated or with an attached letter of certification from the manufacturer to this effect shall be delivered with the equipment and no payment or partial payment for said equipment will be made until such warrantee/certification is delivered to the Engineer.

2. The warrantee shall specifically cover the case where the equipment warranted has been replaced by a newer model. In such instance the warrantee shall either provide spare parts and service to repair or replace in its entirety the original model, or in lieu of this; provide a complete new model unit to replace the warranted and failing equipment. Should the failing equipment be replaced by a new model, the Contractor shall be responsible for making all necessary changes to adjacent and/or connected equipment at no extra cost to the City and to the satisfaction of the Engineer whose decision shall be final.

3. As a part of final inspection, the Contractor shall deliver to the City in a form satisfactory to the Engineer, either warrantees or certifications of warrantee extensions showing the warrantees to be in effect at least one (1) year beyond the planned date of final acceptance.

4. All costs for procuring, maintaining and extending these warrantees shall remain with the Contractor, even in cases where the Contract construction time for completion has been extended. These costs shall be included in the Contractor's bid price and no further compensation will be allowed.

5. In instances where the City puts an item of equipment into full productive service prior to final acceptance, the warrantee shall still be extended to at least one (1) year past final acceptance. However, the City will reimburse the Contractor for the prorated cost of the extended warrantee from the time when the equipment was placed in full productive service to the date of final acceptance based upon the manufacturer's invoice to the Contractor for this cost. Only the warrantee cost will be reimbursed, no overhead or other costs will be allowed.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION NOT

USED

END OF SECTION

01120 SEQUENCE OF CONSTRUCTION

PART 1 – GENERAL 1.0.1

SCOPE OF WORK

A. The sequence of construction has been divided into phases and steps representing major work areas, all of this in order to facilitate to the Contractor the execution of the project and minimize conflicts with operations. The general sequence of construction shall be as described in this Section, but also the City reserves the right to make changes on it.

B. Coordinate sequence of construction with progress schedule to ensure timely performance of the work and project completion within the specified construction time.

C. Special Instructions: It is the intent of the City to construct this project with as little disturbance and annoyance to the pump station's neighbors as possible.

D. The Contractor's equipment must be in first class operating condition, including proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment. The Contractor shall provide a temporary electric service for his electric equipment as specified herein below, and shall pay all cost thereof, including all charges for electricity used during the entire course of the project until its acceptance by the City.

E. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City.

F. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

1.0.2 GENERAL

A. Following receipt of "Notice to Proceed" with the work, the Contractor shall notify the Engineer at least five (5) days before he is ready to start actual construction, to allow the City time to make arrangements for inspection of the work.

B. Contractor's PSM shall reestablish the design baseline, vertical control points and reference points, and establish proposed culvert location in accordance with Section 02314 “Excavation, Backfill and Fill for Structural Facility and Utility Systems”, Construction Methods.

C. The Contractor's equipment must be in first class operating condition, including safety features, proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment.

D. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City.

E. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

F. All items shall be performed by the Contractor with special emphasis on the fact that numerous standard and miscellaneous construction phases are not mentioned specifically but shall be performed by the Contractor as required for a completed Project.

G. Water in the trench shall be kept below the level of the pipe to prevent the entry of debris and contaminants into the pipe.

   1. In instances where Section 02220 – Excavation, General, "Alternate Method of Construction" is approved by the Engineer and used for the Project: During construction, the Contractor shall install a temporary plug, or other means approved by the Engineer, on the open end of the pipe in order to prevent debris and trench water backwash from entering the pipe during trench excavation ahead of the installed pipe. The plug shall remain in place until the following length of pipe is ready to be installed. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

H. No separate payment shall be made for the cost of labor and materials required for the removal of nightcaps, plugs, bulkheads or external blocking and bracing of adjacent mains, for the supplying of water for cleaning and testing, nor for the

interconnecting work to adjacent mains unless listed separately in the Quotation, and the cost of this work shall be included in other applicable items of work.

I. The Contractor is advised that, if the work of this project includes work in the public right of way, that work may be shut down by the roadway governing authority during the period from the beginning of the Thanksgiving holiday through the end of the New Year holiday or some portion(s) of that period. Unless otherwise specifically called out herein, or granted by the Engineer in writing, no extension of Project time will be allowed due to such a shutdown. If any extension of time is allowed, it will be of a noncompensable nature. All costs of such a shutdown including any demobilization/remobilization costs shall be the sole responsibility of the Contractor and no extra compensation will be allowed. Upon ending of any such shutdown, the Contractor shall immediately resume construction operations unless otherwise ordered by the Engineer in writing.

J. The Contractor shall fully comply with any special working hours, and with all other requirements of the Permits, at no additional cost to the City. Working hours noted in permits or the specifications are subject to change. In the event that changed working hours effects the work of the Contractor, the Contractor's sole remedy shall be a noncompensable time extension. Said extension to be full compensation for all direct and indirect costs, including but not limited to loss of efficiency, loss of opportunity, increased bond or insurance premiums, or home office or extended overhead, incurred by the Contractor as a result of such change, and no additional compensation shall be considered. Night work may be required as a part of the construction.

K. New or altered potable water mains, including services, that will be under City control and have an inside diameter of three inches or larger shall be disinfected and bacteriologically evaluated in accordance with FAC Rule 62-555.340. Note that the above requirements are minimum, and the City may require more stringent procedures and routinely requires all services of whatever size be tested and disinfected along with the main. These more stringent or extensive requirements shall be performed by the Contractor and no extra compensation will be allowed.

L. All pipe and fittings installed under this project shall be color coded or marked as required by FAC Rule 62-555.320(21)(b)3, using blue as a predominant color to differentiate drinking water from reclaimed or other water and green as the predominant color for sanitary sewage facilities. Underground metal or concrete pipe shall have colored stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90-degree intervals around the pipe, and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint shall be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe;

for pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Striping shall be continuous and run the full length of the pipe. Aboveground pipe shall be painted shall be color coded or marked like underground pipe.

M. The Contractor shall take steps to provide accessibility for local traffic. The construction in this area shall proceed as quickly as possible and paving shall follow immediately to reduce inconvenience to residents in this area of the project.

N. The Contractor shall take pictures of the work site, in accordance with Section 01380 "Construction Photographs," prior to the start of any construction.

O. The Contractor is advised that, during the construction of the Project, the Construction Manager may require the Contractor to adjust the location of the proposed valves. This relocation(s) shall be performed at no additional cost to the City.

P. Locations of solid sleeves are for general information only. Exact location of solid sleeves shall be determined in the field by the Engineer. Prior to installation of solid sleeves, the pipe and fittings shall be hosed and kept clean, then swabbed with disinfectant as necessary for water main installation. Water in trench shall be kept below the pipe invert.

1.0.3 EXISTING WATER MAINS AND FORCE MAINS

A. The existing mains in the project area shall remain in service until the new mains are placed in service. Connections and disconnections together with cut, plug and abandonment work shall be coordinated through the City's Construction Manager. In all instances, the City's Construction Manager shall, beginning with the Preconstruction Meeting, coordinate with the Operations Division to pre-determine the notification lead times required for various operations.

1.0.4 SEQUENCE OF WORK

A. The general sequence of construction shall be as follows, but **a detailed sequence of construction shall be submitted by the Contractor and approved by the Engineer before any work is started**. The City reserves the right to make changes to the sequence as necessary to facilitate the work or to minimize conflict with operations and no extra compensation will be allowed.

B. CAPITALIZED ITEMS INDICATE WORK OR FUNCTIONS TO BE PERFORMED BY CITY FORCES. All other items shall be performed by the Contractor with special emphasis on the fact that numerous standard and miscellaneous construction phases

are not mentioned specifically but shall be performed by the Contractor as required for a complete Project.

Note: For simplicity, the Sequence of Construction below will not detail the following items. **These shall be the responsibility of the Contractor and no extra compensation will be allowed.**

1. Contractor's field verification of all information provided in the Plans and to determine the type, location, elevation, and extent of any utilities which may not have been shown on the Plans.

2. Notify "Sunshine State One-Call of Florida Inc., 811," forty-eight (48) hours prior to any excavation. Locate all utilities along the route of the Project.

3. Contractor's operations involving removal of the existing Culvert shall include:

   a. Excavate existing Culvert pipes and provide proper flow diversion between the Canal.

4. Installation of new Culvert system, including piping, mitered end section, backfilling, rip rap placement, and concrete pavement.

5. Construction of concrete curb and gutter, sidewalk, handicap access ramp, and guardrails.

6. Milling and resurfacing of pavement extents.

7. Contractor's PSM shall reestablish the design baseline, vertical control points and reference points, and establish proposed pipeline location in accordance with Section 02314 "Excavation, Backfill and Fill for Structural Facilities and Utility Systems - Construction Methods."

8. After items 6 and 7 are completed, the Contractor shall meet with the City Inspector at the Project site and perform a pre-construction walk-through along the entire route of the Project to identify possible problems or conflicts with the proposed pipeline location.

9. The general sequence of work shall be as follows:

1) Phase I – Mobilization

Step – 1 Initiate mobilization. The Contractor shall set up storage, staging and parking areas, temporary environmental controls and tree protection devices in the project site. Obtain permits, develop and submit construction schedule and start shop drawing submittal. Contractor shall allow access to the other facilities within the project area, including adjacent businesses and homes at all times during construction.

Step – 2 Call for locates (Sunshine 811) and document all location marks in the field.

Step – 3 Contractor shall include the necessary provisions to safeguard the existing utilities noted within the project area. Furthermore, the Contractor shall be advised that the utilities shown on plans are based on best available information and shall take all necessary precautions to confirm, identify, preserve, and maintain the integrity while performing construction.

Step – 4 Contractor shall **immediately** open a dialog with all existing utilities in the project area. Contractor shall notify Engineer of any utility relocation requirements and costs. Utility relocations shall be reimbursed under a dedicated allowance account. Failure to properly coordinate any required utility relocations may result in delays for which the Contractor may be liable for.

Step – 5 Verify locations, elevations, dimensions, manufacturer of pipes, equipment, etc., before ordering materials to complete the work in accordance with the Contract Documents, Shop Drawings and field conditions.

Step – 6 Upon approval of shop drawings, order long lead items so that materials may be delivered in a timely fashion without delays to construction.

2) Phase II – Demolition of Existing Culvert and Appurtenances NOTE: Refer to Drawings, Sheets C-01 and C-02

Step – 1 Installation of all Erosion Control measures within the Canal.

Step – 2 Removal of existing concrete pavement, concrete headwall, and culvert piping.

Step – 3 Prepare temporary bypass system, if necessary, to divert Canal flows from East to West and vice versa. After successful flow diversion and authorization by the City; the Contractor shall proceed with the installation of the removal of the existing Culvert piping.

3) Phase III – New Culvert Installation

Step – 1 Prepare bedding material to lay stone base for new piping.

NOTE: The Contractor shall provide appropriate shoring to conduct the stone bedding and 66-inch SRASP pipe installation in dry conditions.

Step – 2 Secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations.

Step – 3 The Contractor shall secure the three (3) pipes in place to conduct backfilling in lifts/compaction in accordance with the manufacturer's recommendations and up to elevation established on plans. Embankment slopes shall be established.

Step – 4 Install concrete headwall at pipe ends.

Step – 5 Install geotextile matting and, sand-cement and Rubble Stone embankment stabilization.

Step – 6 Lay new concrete curb and gutter and sidewalk.

Step – 7 Install new guardrail.

Step – 8 Install new concrete shoulder barrier

4) Phase IV – Final Sitework and Project Closeout

Step – 1 Form and pour the 8" thick concrete pavement surface above Culvert piping.

Step – 2 Lay new concrete curb and gutter and sidewalk.

Step – 3 Mill and resurface top 1" surface course of roadway.

Step – 4 Paint roadway pavement markings and remove temporary construction signage.

Step – 5 Demobilization and related closeout activities shall be in accordance with section 01700 "Project Closeout".

Step – 6 Complete all remaining miscellaneous and appurtenant work, including restoration of damaged survey control points, landscape restoration and final inspection and cleanup.

C. The Contractor's equipment must be in first class operating condition, including proper mufflers and other silencing accessories. All equipment must be properly lubricated on a special maintenance type schedule to reduce noise, including tracks, rollers, idlers, sheaves and other noise producing components. Care must be taken to prevent oil spillage of any kind or oil dripping from equipment. The Contractor shall provide a temporary electric service for his electric equipment as specified herein below, and shall pay all cost thereof, including all charges for electricity used during the entire course of the project until its acceptance by the City. If the equipment used proves less than satisfactory and is unduly or needlessly disturbing the neighbors, in the opinion of the Engineer, he will have the right to order the Contractor to immediately modify the equipment to make it satisfactory, or to change to other equipment that is satisfactory at no additional cost to the City. During construction the Contractor shall, by sprinkling with water or by other means approved by the Engineer, eliminate dust annoyance to adjacent property owners. No additional compensation will be paid to the Contractor for any costs incurred in complying with the provisions herein.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

01200 PROJECT MEETINGS

PART 1 – GENERAL 1.0.1.

PROJECT SCHEDULES

A. General: Develop and submit for approval by the City a construction progress schedule and phasing plan demonstrating complete fulfillment of all Contract requirements including all activities of Subcontractors, equipment vendors and suppliers. Unless otherwise directed by the Engineer, the construction progress schedule shall be computer developed and maintained using Microsoft Project software as manufactured by Microsoft Corporation, Primavera, or equal. The Contractor shall prepare a network plan utilizing CPM (Critical Path Method). The City reserves the right to request progress schedule on magnetic media.

B. Submittal: The progress schedule shall be plotted on 11-inch by 17-inch paper and shall be reviewed and updated monthly, depicting progress through the last day of the current month and scheduled progress through completion. Six up to date copies of the schedule shall be submitted along with the application for monthly progress payments for the same period.

1. Immediately after award of contract, submit for review the progress schedule describing the activities to be accomplished and their dependency relationships, showing starting and completion dates for each activity in terms of the number of days after receipt of Notice to Proceed. All completion dates shown shall be within the period specified for contract completion.

2. After receipt and initial review, the Engineer will meet with the Contractor for joint review, correction or adjustment of the proposed plan and schedule. Within five (5) calendar days after the joint review, the Contractor shall revise the schedule in accordance with agreements reached during the joint review and shall submit two copies of the revised schedule. After the Contractor has received both the Notice to Proceed and the approved copy of the schedule, he shall immediately add calendar dates in lieu of the number of days from the date of Notice to Proceed and shall furnish two copies of the revised schedule to the Engineer.

C. Schedule Requirements:

1. Show the sequence and interdependence of activities required for complete performance. In preparing the schedule, break up the work into activities of a duration of no longer than fifteen working days each, except as to non-construction activities (such as procurement of materials, delivery of equipment and concrete curing) and any other activities for which the Engineer may approve the showing of longer duration. The schedule shall show the activities for actual construction work for each trade category of the project. The Contractor is to include a schedule of submittals of shop drawings, equipment schedules, coordination drawings, templates, fabrication, delivery and the like, and review and approval of shop drawings. Activities related to a specific physical area of the project shall be grouped on the schedule for ease of understanding and simplification. Activity

duration (i.e. the single best estimate, considering the scope of the activity, and the resources planned for the activity) shall be shown on each activity on the diagram. To the extent that the schedule or any revised schedule shows anything not jointly agreed upon or fails to show anything jointly agreed upon, it shall not be deemed to have been approved by the Engineer. Failure to include any element of work required for the performance of this Contract shall not excuse the Contractor from completing all work required within any applicable completion date, notwithstanding the City's approval of the schedule.

2. Include a cost estimate for each activity which cumulatively equals the total Contract cost. Estimated overhead and profit shall be prorated throughout all activities. The partial payments as defined under the General Conditions will be based on these approved activity costs.

3. With each request for a partial payment, submit a copy of the approved schedule marked to show the activities completed and partially completed, for which payment is requested.

4. The Contractor is advised that, if the work of this project includes work in the public right of way, that work may be shut down by the roadway governing authority during the period from the beginning of the Thanksgiving holiday through the end of the New Year holiday or some portion(s) of that period. Unless otherwise specifically called out herein, or granted by the Engineer In writing, no extension of Project will be allowed due to such a shutdown. If any extension of time is allowed, it will be a non-compensable nature. All costs of such a shutdown including any demobilization/re-mobilization costs shall be the sole responsibility of the Contractor and no extra compensation will be allowed. Upon ending of any such shutdown, the Contractor shall immediately resume construction operations unless otherwise ordered by the Engineer in writing.

5. The Contractor shall fully comply with any special working hours, and with all other requirements of the Permits, at no additional cost to the City. Working hours noted in permits or the specifications are subject to change. In the event that changed working hours affects the work of the Contractor, the Contractor’s sole remedy shall be a non-compensable time extension. Said extension to be full compensation for all direct and indirect costs, including but not limited to loss of efficiency, loss of opportunity, increased bond or insurance premiums, or home office or extended overhead, incurred by the Contractor as a result of such change, and no additional compensation shall be considered. Night work may be required as a part of the construction.

1.0.2. PROGRESS MEETINGS

A. General progress meetings will be held once each week at which every entity then involved in the planning, coordination and performance of work shall be discussed. The progress of each element of current work shall be discussed as to whether it is ahead of schedule, on time or behind time in relation to the updated progress schedule. For each meeting, the Contractor shall prepare a detailed three (3) week "look ahead" schedule in addition to, showing the progress schedule of the previous week. Methods to expedite behind-time work shall be determined, and commitments secured for bringing back to the scheduled date for the entities involved. Everything of significance which could affect the progress of the work, including schedule revisions, shall be discussed to ensure that current and subsequent work will be completed within the Contract time. Within three days after each meeting, copies of the minutes of the meeting, including a brief summary of progress of the work since the previous meeting, shall be distributed to each present or who should have been present. Whenever revisions to the progress schedule have been made or recognized at the progress meeting, a copy of the revised schedule shall accompany the minutes distributed.

B. Each computer-generated construction progress schedule and report shall include the following minimum items:

1. Activity Numbers.
2. Duration Estimate.
3. Activity Description.
4. Early Start Date (Calendar Dated).
5. Early Finish Date (Calendar Dated).
6. Latest Allowable Start Date (Calendar Dated).
7. Latest Allowable Finish Date (Calendar Dated).
8. Status (whether critical).
9. Estimated Cost of The Activity.
10. Total Float and Free Float.

C. In addition, each construction progress schedule, network analysis and report shall be prefaced with the following summary data:

1. Contract Name and Number.

2. Contractor's Name.

3. Contract Duration.

4. Contract Schedule.

5. The Effective or Starting Date of The Schedule (the date indicated in the Noticeto-Proceed).

D. The workday to calendar date correlation shall be based on an 8-hour day and 40hour week with adequate allowance for holidays, adverse weather and all other special requirements of the work. Normal work hours are Monday thru Friday, 7:30 am to 4:30 pm.

E. If the Contractor desires to make changes in the method of operating which affects the construction progress schedule and related items, he/she shall notify the Engineer in writing stating what changes are proposed and the reason for the change. If the Engineer accepts these changes, in writing, the Contractor shall revise and submit, without additional cost to the City, all of the affected portions of the construction progress schedule, and associated reports. The construction progress schedule and related items shall be adjusted by the Contractor only after prior acceptance, in writing by the Engineer. Adjustments may consist of changing portions of the activity sequence, activity durations, division of activities, or other adjustments as may be required. The addition of extraneous, non-work activities and activities which add restraints to the construction progress schedule shall not be accepted.

F. Except where earlier completions are specified, schedule dates which show completion of all work prior to the contract completion date shall, in no event, be the basis for claim for delay against the City by the Contractor.

G. Construction progress schedules and related items which contain activities showing negative float or which extend beyond the contract completion date will not be accepted by the Engineer. Whenever it becomes apparent from the current construction progress schedule and associated reports that delays to the critical path have resulted and the contract completion date will not be met, or when so directed by the Engineer, the Contractor shall take some or all of the following actions at no additional cost to the City. They shall submit to the Engineer for approval, a written statement of the steps they intend to take to remove or arrest the delay to the critical path in the current construction progress schedule.

1. Increase construction manpower in such quantities and crafts as will substantially eliminate the backlog of work.

2. Increase the number of working hours per shift, shifts per day, working days per week, the amount of construction equipment, or any combination of the foregoing, sufficiently to substantially eliminate the backlog of work.

3. Reschedule activities to achieve maximum practical concurrence of accomplishment of activities and comply with the revised schedule.

H. If when so requested by the Engineer, the Contractor should fail to submit a written statement of the steps they intend to take or should fail to take such steps as reviewed and accepted in writing by the Engineer, the Engineer may direct the Contractor to increase the level of effort in manpower (trades), equipment and work schedule (overtime, weekend and holiday work, etc.) to be employed by the Contractor in order to remove or arrest the delay to the critical path in the current construction progress schedule, and the Contractor shall promptly provide such level of effort at no additional cost to the City.

I. If the completion of any activity, whether or not critical, falls more than 100 percent behind its previously scheduled and accepted duration, the Contractor shall submit for approval a schedule adjustment showing each such activity divided into two activities reflecting completed versus uncompleted work.

J. Shop drawings which are not approved on the first submittal or within the time scheduled, and equipment which does not pass the specified tests and certifications shall be immediately rescheduled.

K. The contract time will be adjusted only in accordance with the General Requirement and other portions of the Contract Documents as may be applicable. If the Engineer finds that the Contractor is entitled to any extension of the contract completion date, the Engineer's determination as to the total number of days extension shall be based upon the current construction progress schedule and on all data relevant to the extension. Such data shall be included in the next updating of the schedule and related items. Actual delays in activities which, according to the construction progress schedule, do not affect any contract completion date will not be the basis for a change therein.

L. From time to time it may be necessary for the contract schedule of completion time to be adjusted by the City in accordance with the General Requirements and other portions of the Contract Documents as may be applicable. Under such conditions, the Engineer will direct the Contractor to reschedule the work or contract completion time

to reflect the changed conditions, and the Contractor shall revise the construction progress schedule and related items accordingly, at no additional cost to the City.

M. Available float time may be used by the City through the City's Engineer.

N. The City controls the float time and, therefore, without obligation to extend either the overall completion date or any intermediate completion dates the City may initiate changes that absorb float time only. City initiated changes that affect the critical path on the network diagram shall be the sole grounds for extending the completion dates. Contractor-initiated changes that encroach on the float time may be accomplished only with the City's concurrence. Such changes, however, shall give way to City-initiated changes competing for the same float time.

O. To the extent that the construction project schedule, or associated report or any revision thereof shows anything not jointly agreed upon or fails to shown anything jointly agreed upon, it shall not be deemed to have been accepted by the Engineer. Failure to include on a schedule any element of work required for the performance of this Contract shall not excuse the Contractor from completing all work required within any applicable completion date, notwithstanding the review of the schedule by the Engineer

P. Review and acceptance of the construction progress schedule, and related reports, by the Engineer is advisory only and shall not relieve the Contractor of the responsibility for accomplishing the work within the contract completion date. Omissions and errors in the construction progress schedule, and related reports shall not excuse performance less than that required by the Contract and in no way make the Engineer an insurer of the Contractor's success or liable for time or cost overruns flowing from any shortcomings in the construction progress schedule, and related reports.

Q. The Contractor shall present and discuss the proposed schedule at the preconstruction conference.

R. The construction progress schedule shall be based upon the precedence diagramming method of scheduling and shall be prepared in the form of a horizontal bar chart showing in detail the proposed sequence of the work and identifying all construction activities included but not limited to yard piping, all structures and treatment units and all related work specified herein to be performed under the Contract. The schedule shall be time scaled, identifying the first day of each week, with the estimated date of starting and completion of each stage of the work in order to complete the project within the contract time. The project critical path shall be clearly identified.

1.0.3. DAILY REPORTS

A. Prepare and submit to the Engineer at regular intervals not exceeding weekly intervals, a daily report recording information concerning events at the site. The daily reports shall contain the following and any other significant information:

1. General weather conditions, rain, high/low temperatures.
2. List of Subcontractors on site.
3. List of separate Contractors at the site, if any.
4. Meetings and significant decisions.
5. Stoppages, delays, shortages, losses.
6. Emergency procedures, field orders.
7. Orders/requests by governing authorities.
8. Other events or activities.
9. Partial completions.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION NOT

USED

END OF SECTION

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Submittals covered by these requirements include manufacturers' information, shop drawings, test procedures, test results, samples, requests for substitutions, and miscellaneous work-related submittals. Submittals shall also include, but not be limited to, all mechanical, materials, reinforcing steel, fabricated items, and piping and conduit details. The Contractor shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules, and manufacturer's installation and other instructions as specifically required in the contract documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.

B. The Contractor shall submit copies of all permit applications, permit submittals, permit comments and permit approvals.

C. Within 10 calendar days after Notice to Proceed, Contractor shall submit a complete list of all anticipated submittals including shop drawings, submittals, and product data with an anticipated delivery date to the Engineer and review and approval times. This shall be reviewed during the Project Kickoff Meeting and shall be continuously updated and reviewed during Project Progress Meetings.

1.0.2. CONTRACTOR'S RESPONSIBILITY

A. The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the specified requirements. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and notify the Engineer in each case where his submittal may affect the work of another Contractor or the Owner. The Contractor shall coordinate submittals among its Subcontractors and suppliers including those submittals complying with unit responsibility requirements.

B. Record Drawings: Refer to Section 01720 "Project Record Drawings".

C. As-Built Record Drawings: Refer to Section 01725 "As-Built Record Drawings".

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION NOT

USED

END OF SECTION

01340 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Before proceeding with the erection of the construction plan, including the setting or placing thereof, and the erection of other temporary structures, the Contractor shall furnish the Engineer with such information and plans as the City may require.

B. Shop Drawings (including Pre-Approved Product List submittals) shall be submitted prior to any project construction activity. In a timely fashion, well before the contemplated ordering for fabrication of special order or long-lead items or construction use of any standard element of the work, the Contractor shall furnish Shop Drawings for the review and approval of the City.

C. It is the Contractor's sole responsibility, upon the first occasion of submittal of a particular element of the work, to submit Shop Drawings of an element which match and fulfill the requirements and intent of the plans and specifications. Any delays or costs caused, either directly or indirectly, by non-timely submissions; submission of items differing significantly from the intent of the plans and/or specifications; repeated submission of, or argument over, rejected elements or changes required for acceptance; arguments with the criteria or requirements of the plans or specifications; or any other such similar activities shall be at the expense of the Contractor.

D. It is the intent of the Contract Documents that the Contractor shall, in the first instance, submit Shop Drawings of elements which meet or exceed the requirements of the Contract Documents and fit with the other elements of the work and the existing conditions. Delays or the inability to obtain shop drawing approval may subject the Contractor to costs for liquidated or actual damages as specified in the Contract.

1.0.2. DESCRIPTION OF WORK

A. It is the intent of the Contract Documents that the Contractor shall, in the first instance, submit Shop Drawings of elements which meet or exceed the requirements of the Contract Documents and fit with the other elements of the work and the existing conditions. Delays or the inability to obtain shop drawing approval may subject the Contractor to costs for liquidated or actual damages as specified in the Contract.

B. After award of the project, the Contractor may begin providing submittals for approval. Submit to the Engineer a complete list of preliminary data on items for which Shop

Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way expressed or implied relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the specifications. This procedure is required in order to expedite final review of Shop Drawings.

C. Maintain an accurate updated Shop Drawing submittal log which shall include the following items:

1. Submittal Description and Number Assigned.
2. Specification Section.
3. Plans Sheet Number.
4. Date to Engineer.
5. Date Returned to Contractor (from Engineer).
6. Status of Submittal (Approved, Approved as Noted, Rejected/Resubmit).
7. Date of Resubmittal and Return (as Applicable).
8. Date Material Release (for Fabrication).
9. Projected Date of Fabrication.
10. Projected Date of Delivery to site.
11. Status of O & M Manuals Submittal.

1.0.3. CONTRACTOR'S RESPONSIBILITY

A. Furnish the Engineer with a schedule of Shop Drawings submittals, fixing the respective dates for the submission of Shop Drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.

B. Submit to the Engineer all plans and schedules sufficiently in advance of construction requirements to provide maximum time for checking and appropriate action from the time the Engineer receive them.

C. It is the duty of the Contractor to check and approve all plans, data and samples prepared by or for him/her before submitting them to the Engineer for review. Each and every copy of the plans and data shall bear Contractor's stamp showing that they have been checked and approved. Shop Drawings submitted to the Engineer without the Contractor's stamp and approval shall be returned to the Contractor for conformance with this requirement before Engineer's review. ***Shop Drawings shall indicate any deviations in the submittal from requirements of the Project Documents and the Contractor shall state the reason why a deviation is required.***

D. All submittals shall be accompanied by a submittal registry and transmittal letter containing the following information:

1. Date.

2. Project Title and Number.

3. Contractor's name and address.

4. The number of each Shop Drawing, Data, and Sample submitted.

5. Notification of Deviations from Project Documents.

6. Submittal Log Number conforming to and referring to Specification Section Number.

7. Contractor signature or of its authorized representative.

E. Submit seven copies of Shop Drawings and of descriptive or product data submittals necessary to complement Shop Drawing. The Engineer will retain five sets.

F. After receiving approval by the Engineer, the Contractor shall be responsible for submitting the Shop Drawings to the City. Shop Drawings of all premanufactured items and all other Shop Drawings are required to obtain approval prior to manufacturing or installing the submitted items. The Contractor shall also be responsible for contesting any interpretations by the City that considers non-acceptable. The Contractor shall include in the bid prices, all costs for permits, fees and expenses associated with the submittals, including resubmittals (if any) of Shop Drawings to the City.

G. Do not begin any of the work covered by a drawing, data, or a sample returned as “Rejected/Resubmit” until a revision or correction thereof has been reviewed and returned to the Contractor, by the Engineer, with approval or approval “As Noted”. Be responsible for and bear all costs of damages which may result from the ordering of any material or from proceeding with any part of work prior to receiving Engineer's approval or approval “As Noted” of the necessary Shop Drawings.

H. Be fully responsible for observing the need for and for making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the materials/equipment the Contractor proposes to supply, both as they pertain to the Contractor’s own work, work of others, or of other Divisions herein or Trades and clearly show such changes on the Shop Drawings.

I. When substitutions in materials or equipment are allowed, the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense.

J. When substitutions in materials or equipment are allowed, the Contractor shall be solely responsible for all costs and time required by any differences in construction methods, fabrication or assembly required and no additional time will be allowed.

K. Determine and verify:

1. Field measurements.

2. Field construction criteria.

3. Catalog numbers and similar data.

4. Conformance with specifications.

5. That installation and maintenance clearances are sufficient particularly when equipment or arrangement changes have been made.

1.0.4. ENGINEER’S REVIEW OF SHOP DRAWINGS

A. Engineer’s review of plans, data and samples, submitted by the Contractor will cover only general conformity to the drawing and specifications. The Engineer's review will not constitute an approval of dimensions, quantities, and details of the material,

equipment, device, or item shown. The review of plans and schedules will be general, and shall not be construed:

1. As permitting any departure from the Contract requirements.

2. As relieving the Contractor of responsibility for any errors, including detail, dimensions, and materials.

3. As approving departures from details furnished by the Engineer, except as otherwise provided herein.

B. Variations:

1. If the plans or schedules, as submitted, describe variations per paragraph 1.03 C, and show a departure from the Contract requirements which Engineer finds to be in the interest of the City and to be so minor as not to involve a change in Contract price or time for performance, the Engineer may return the reviewed plans without noting an exception.

2. If the plans or schedules, as submitted, describe variations and show a departure from the Contract requirements which the Engineer finds to be minor enough to be corrected by redlining the submittal, the Engineer will mark and return the submittal marked "Approved as Noted." The redlined corrections shall be as binding on the Contractor as would be a resubmission embodying the same corrections.

C. When reviewed by the Engineer, each of the Shop Drawings shall be stamped and dated to indicate it had been reviewed. Shop Drawings stamped "Revise and Resubmit" and with required corrections shown will be returned to the Contractor for correction and resubmittal.

D. If the Contractor considers any correction indicated on the Shop Drawings to constitute a change to the project plans or specifications, the Contractor shall give written notice thereof to the Engineer who will render a decision which shall be final. After the decision has been made, the Contractor shall without delay, provide the corrections to the plans.

E. When the Shop Drawings have been approved by the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

F. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor for resubmittal.

1.0.5. SHOP DRAWINGS

A. Shop drawings shall be of such character that they may be used as fabrication drawings. Prior to submission, the Contractor shall thoroughly check such drawings, satisfying himself that they meet the requirements of the Plans and Specifications and that they are coordinated with the arrangements set forth on other shop drawings, and shall place on them the Project Number, the date and his signature and stamp of approval. Where items for which shop drawings are submitted are to meet special conditions listed in the detailed Specifications, the conditions shall be so noted on the drawing. Where there is a deviation from the Specifications, the Contractor shall note it and state the reason why a deviation is required. Two copies will be returned to the Contractor with the Engineer's mark of approval thereon, or will be marked to indicate changes necessary to effect compliance with the Specifications and the remaining copies will be retained by the City. When shop drawings are approved by the Engineer, they shall be as binding as any of the Contract Documents. Any errors or omissions on the shop drawings shall not relieve the Contractor of his responsibility.
   He shall correct such errors, or omissions, including any necessary additions or alterations to construction, at his expense upon notification by the Engineer.

B. Shop drawings submitted without the required approval as specified above shall be returned without review and no extension of time will be granted for any delays caused by such improper submission.

C. The approval of shop drawings and data will be general, and shall mean that upon examination of the shop drawings, no variations from the Contract requirements have been discovered, and approval will not relieve the Contractor of his responsibilities as defined under the Contract.

D. When used in the Project Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for materials and equipment which become an integral part of the project. These Shop Drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance/test data shall be considered only as supportive to required Shop Drawings as defined above.

E. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked to identify pertinent materials, product or models. Information which is not applicable to the work shall be deleted by striking or cross hatching.

F. If plans show variations from Contract requirements because of standard shop practice or for other reasons, describe such variations in the letter of transmittal. If no explanation of these variations is provided, the Contractor shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such plans have been reviewed and approved.

G. For all mechanical and electrical equipment furnished, provide a list including the equipment name, address of and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.

H. All manufacturers or equipment suppliers who propose to furnish equipment or products shall submit an installation list to the Engineer along with the required Shop Drawings. The installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least five years, unless otherwise specified. Manufacturers and/or equipment which fails to meet the specified experience period will be considered if the manufacturer or supplier provides a bond or cash deposit which will guarantee replacement of the equipment or process in the event of failure or unsatisfactory service.

I. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.

1.0.6. REQUIRED INFORMATION

A. Submit, as applicable, the following for all prefabricated or manufactured structural, mechanical, electrical, plumbing, process system, and equipment work:

1. Shop Drawings or equipment drawings, including dimensions, size and location of connections to other work, and weight of equipment.

2. Catalog information and cuts.

3. Installation or placing plans for equipment, drives, and bases.

4. Supporting calculations, signed and sealed by a Florida Registered Engineer when required, for equipment and associated supports, or hangers required or specified to be designed by equipment manufacturers.

5. Signed and sealed calculations and plans by in-house Florida Registered Professional Engineer for structural systems, indicating compliance to the structural design criteria specified in the plans.

6. Complete manufacturer's specifications, including materials description and paint system.

7. Performance data and pump curves.

8. Suggested spare parts with current price information.

9. List of special tools required for testing, checking, parts replacement, and maintenance. (Special tools are those which have been specially designed or adapted for use on parts of the equipment, and are not customarily and routinely carried by maintenance mechanics)

10. List of special tools furnished with the equipment

11. List of materials and supplies required for the equipment prior to, and during startup

12. List of materials or supplies furnished with the equipment

13. Special handling instructions

14. Requirements for storage and protection prior to installation

15. Requirements for routine maintenance required prior to equipment startup

16. List of all requested exceptions to the Project Documents

1.0.7. SUBMITTAL REQUIRED FOR FOREIGN MANUFACTURED ITEMS

A. In addition to the submittal requirements stated above, suppliers of foreign manufactured items shall submit the names and addresses of companies within the United States that maintain technical service representatives and a complete inventory of spare parts and accessories for each foreign-made item proposed for incorporation into the work. Failure to prove these capabilities shall be cause for rejection of the foreign manufactured items.

B. Foreign manufactured equipment and materials shall in all cases be clearly and permanently marked with the manufacturer’s name and country of origin of the item. The name of the U.S. importing/supplying firm is not acceptable. Shop Drawing submittals of foreign-made items shall be accompanied by written information to include name and location (i.e. country, City, and street address) of the manufacturer. This requirement shall also apply to the foreign made elements of items assembled in this country from parts wholly or partially manufactured overseas.

1. The words, “Permanently Marked” as used in this paragraph shall mean; die stamped, cast-in, welded, or otherwise marked such that the removal of the marking by any mechanical or chemical means will result in obvious permanent damage to the surface marked. These markings shall be on surfaces which are not hidden by assembly.

C. Where specified elsewhere herein or at the sole discretion of the Engineer, whose word shall be final, supply verification of quality, suitability or other aspects, as directed by the Engineer, from a Professional Engineer licensed to practice in the State of Florida or the state where the supplying U.S. firm is located. The verification shall be signed, sealed, and dated. All costs for this verification shall be at the sole expense of the Contractor and no extra compensation will be allowed. Verification by foreignbased engineers, firms, manufacturers, etc. will not be acceptable.

1.0.8. SAMPLES

A. Furnish for the approval of the Engineer, samples required by the Project Documents or required by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until approved by the Engineer.

B. Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices.

2. Full range of color, texture and pattern.

3. A minimum of two samples of each Item shall be submitted.

C. Each sample shall have a label indicating:

1. Name of Project.

2. Material or Equipment Represented.

3. Name of Producer and Brand (if any) Location in Project.

D. Prepare a transmittal letter in triplicate for each shipment of samples containing the information specified herein in Paragraph 1.05 A. Enclose a copy of this letter with the

shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use specified and shall not be construed to change or modify any Contract requirements.

E. Approved samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the approved samples.

1.0.9. SUSTITUTION

A. Changes in products, materials, equipment, and methods of construction required by the Contract Documents, which are proposed by the Contractor after award of the Contract, are considered to be requests for substitutions. Where the plans and/or specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use. Articles or products of similar characteristics may be offered for the approval of the Engineer, whose decision shall be final. Copies of complete descriptive data shall be furnished regarding all materials furnished by the Contractor, consisting of Dimension drawings, catalog references, product data, cost, and other information necessary to clearly identify and evaluate each article.

B. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent, connected, or other structures and equipment at his expense. the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense. Said engineering design services shall be of an extent satisfactory to the Engineer whose word shall be final and shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.

C. Where there is a deviation from the Specifications, the Contractor shall note it and state the reasons why a deviation is required.

D. Where engineer-recommended changes, substitutions or appurtenant work require engineering design, the Contractor shall have such design services performed. Those engineering design services shall be of an extent satisfactory to the Engineer, whose decision shall be final.

E. The approval of Pre-Approved product sheets, shop drawings and data will be general and shall mean that upon examination of the drawings, no variations from the approved project drawings and project requirements have been discovered, and approval will not relieve the Contractor of his responsibilities as defined above. The

City's review will not constitute an approval of dimensions, quantities and details of the material, equipment or item shown.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01380 CONSTRUCTION PHOTOGRAPHS AND VIDEO PHOTOGRAPHY

PART 1 – GENERAL 1.0.1

DESCRIPTION OF WORK

A. This section specifies the taking and submission of construction photographs and audio-video photography.

B. Prior to the delivery of any equipment, materials or supplies to the site of any work, or to the beginning of any of the construction work, the Contractor shall provide preconstruction photography as specified herein for the purpose of establishing the surface conditions existing in all of the areas to be affected by the construction of the Project.

C. Pre-Construction Photographs: The Contractor shall video/photograph the entire project site during normal working hours including all concrete and asphalt pavements, curb and gutter, fencing, landscaping to remain, structures to be demolished, and existing structures that are to be modified. All videos and photographs shall be date and time stamped and a digital copy submitted on a flash drive/memory stick or media acceptable to the City prior to beginning construction activities. The video/photographs shall clearly identify existing site and structural conditions.

D. Ground photography shall consist of photographs and color video taping of surface features taken along the entire length of the Project and including all work, intersecting roadways and properties that will be impacted by the water service conversions.

E. The purpose of the color audio-video taping of the project is to provide the necessary information for restoration of surface features after completion of the Project. The Contractor shall be responsible for repairing any damage or defect not documented as existing prior to construction.

1.0.2 QUALITY ASSURANCE

A. Photographs shall be clean, sharp and clearly show details. Out-of-focus photographs will not be acceptable.

B. Digital photographs which are poorly lit or lack definition will not be acceptable

1.0.3 SUBMITTALS

A. Submit one (1) final digital file of each construction photograph and one (1) flash drive/memory stick or acceptable media with the video as follows:

1. Within fourteen (14) days of receiving Notice to Proceed

2. Number photographs in sequence beginning with the numeral one

PART 2 – PRODUCTS 2.0.1

SIZE AND QUALITY

A. Digital pictures and videos shall be compatible with City's software, color, 3½-inches by 5-inches.

B. Digital pictures and videos shall be compatible with City's software.

2.0.2 IDENTIFICATION

A. Each photograph shall be stamped with the following information stamped or typed on the back of the print:

CITY OF OPA-LOCKA WORKS DEPARTMENT
Contract No. _____
1-91

CONTRACTOR: _____

Photograph No. _____ Date: _____ Time: _____

Description: _____

_____

_____

2.0.3 QUANTITY

A. A minimum of twelve (12) photographs shall be taken prior to construction and twelve more each month until completion of the Work.

B. In the instance of a pipeline installation, take a minimum of one photograph each 200 feet or fraction thereof along the entire route of the main initially. During construction a minimum of one photograph every two hundred feet or fraction thereof of that portion of the main constructed during the month until completion.

C. The number of photographs required shall be at the sole discretion of the Engineer whose decision shall be final.

D. An increase in the number of photographs above the minimums shall not be cause for an increase in cost and no extra compensation will be allowed.

2.0.4 VIDEO PHOTOGRAPHY

A. Color audio-video shall be submitted on a flash drive/memory stick or acceptable media.

PART 3 – EXECUTION

3.0.1 INITIAL AND CONSTRUCTION PHOTOGRAPHY

A. Take pre-construction photographs of the entire site or route of the main after receiving the Notice to Proceed and prior to disturbing the site in any manner. Coordinate with the Engineer as to the vantage points and number of photographs required in Paragraph 2.0.3.

B. Photography During Construction: Coordinate with the Engineer as to the actual number and location of views to be photographed and the day and time of photographing.

C. Photographic equipment utilized shall be of sufficient quality to produce pictures capable of being enlarged without loss of definition or sharpness.

3.0.2 PHOTOGRAPHY DURING CONSTRUCTION

a. Coordinate with the Engineer as to the actual number and location of views to be photographed and the day and time of photographing.

3.0.3 VIDEO PHOTOGRAPHY

A. Coverage of Taping: Such coverage shall include, but not be limited to, all existing driveways, sidewalks, curbs, streets, signs, landscaping, trees, catch basins, fences, visible utilities and all buildings located within the work zone of the Project. Of particular concern are any existing faults, fractures, defects or other features. Audio description shall be made simultaneously with and support the video coverage.

B. Streets: shall be recorded by audio-video tape for the full width of the right-of-way, except where specifically noted otherwise by the Engineer.

C. Front, Side and Rear Yard Areas: shall be recorded by audio-video tape of properties impacted by the water service conversions.

3.0.4 LOCATION INFORMATION

A. All flash drives/memory sticks or other acceptable media shall be properly identified by number, location and project name in a manner acceptable to the Engineer.

B. A record of the contents of each flash drive/memory stick or acceptable media shall be supplied on a run sheet identifying each segment in the tape by location, i.e., street viewing side, traveling direction, engineering stationing, and all referenced by tape counter numbers.

C. All video recordings shall begin with the date and time of recording, the project name, the sheet numbers of engineering stationing as shown on the plans, the name of the street, area or building being taped, the direction of travel and the viewing side. Houses and buildings shall be identified visually by house or building address, when possible, in such manner that the progress of the taping and the proposed system may be located by reference to the houses and buildings.

3.0.5 SITE RECORDING CONDITIONS

A. All audio-video taping shall be done during times of good visibility. No outside taping shall be done during periods of visible precipitation or when the ground area is covered with leaves or debris, unless otherwise authorized by the Engineer.

B. In order to produce the proper detail and perspective, adequate auxiliary lighting will be required to fill in shadow areas caused by trees, utility poles, road signs and other such objects, as well as other conditions requiring artificial illumination.

C. The average rate of speed in the general direction of travel of the conveyance used during taping shall not exceed 60 feet per minute. Planning rates and zoom-out rates shall be controlled sufficiently so that playback will produce adequate clarity of the object being viewed.

END OF SECTION

01400 QUALITY CONTROL

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The intent of this section is to emphasize the City interest in quality products being designed and installed within the time and cost considerations of the project. The Contractor shall have primary responsibility for providing Quality Control (QC) for project during both design and construction phases. Quality Control includes, but is not limited to, such functions as:

1. Assuring only latest revisions of design and other documents used for construction (e.g., Shop Drawings, catalog cuts, schedules) are being used by project staff.

2. Inspection of materials and equipment delivered to the site.

3. Inspection and maintenance of materials and equipment in storage.

4. In progress and Final Inspection of the constructed product.

5. Manufacturer's Certification of Installation for service intended.

6. Reporting on work in progress daily.

B. The Contractor shall have a QC System and sufficient QC staff, in place in the design team office and on the jobsite always that work is underway.

C. The Contractor is responsible for controlling the quality of the work, including that portion of the work performed by Engineer of Record, the Cogeneration system manufacturer and on-site Subcontractors. The Contractor is also responsible for assuring that suppliers and manufacturers providing materials and products to be incorporated into the work satisfy the specified quality, provide required documentation, and provide those services as specified within the technical portions of the specifications.

D. The Contractor shall develop and submit a Quality Control Plan which identifies the reporting structure of the QC organization, defines the procedures to be implemented by the Contractor to assure the specified quality is achieved, and details the daily reporting protocol. Within 20 calendar days of the Notice to Proceed (NTP), the Contractor shall submit their proposed Quality Control Plan. The Engineer will schedule a review meeting of the outline within one week of receipt of the plan outline. Final submission of the quality control plan shall be made no later than 10 calendar days following the review meeting.

E. The Contractor and Engineer will coordinate materials testing for cast-in-place concrete, earthwork, and paving.

1.0.2. MATERIALS AND EQUIPMENT

A. The Contractor shall maintain control over procurement sources to ensure that materials and equipment conform to specified requirements.

B. The Contractor shall comply with manufacturer's instructions regarding all facets of materials and/or equipment movement, storage, installation, testing, startup, and operation.

C. The Contractor shall prepare, complete, and maintain all equipment, pipe, and testing logs that document the dates and disposition of each specific test conducted. The logs will be comprised of a summary sheet that is corroborated by individual test report

forms that document the specific tests. The individual test report form will be provided by the Engineer.

1.0.3. MANUFACTURER'S TECHNICAL REPRESENTATIVE

A. When specified in the technical specification sections, the Contractor shall arrange for and provide technical representation directly from the manufacturers of respective equipment items or components.

B. If, in the opinion of the Engineer, the Manufacturer's Representative fails to satisfy the terms of this Specification section, the Engineer may direct the Contractor to replace the Representative with a different representative, and those hours expended by the disapproved representative will not be counted against the service hours specified for the system/unit/component.

PART 2 – PRODUCTS 2.0.1.

QUALITY CONTROL PLAN

A. The Quality Control Plan shall be a formal document prepared under the direction of the Contractor. The Plan will be the basis by which the Engineer will monitor the QC effort associated with executing the work.

B. The Plan shall address the Quality Control Organization and the roles each member of the organization plays in satisfying the quality requirements of the work.

C. Included within the plan will be basic guidelines associated with the checking and monitoring of work as it progresses and how the guidelines will be used by Contractor's supervisors and representatives to provide the required quality.

D. The process for notification of quality concerns shall be included in the Plan.

2.0.2. REPORTS

A. Monthly Quality Control Summary that addresses the following:

1. Certification by Contractor that all work not specifically cited by a NonConformance Report satisfies the requirements of the Contract Documents.

2. Summary table identifying all non-conformance notices and their respective current status.

B. Certificate of Proper Installation shall address installation of equipment items.

PART 3 – EXECUTION 3.0.1.

QUALITY CONTROL

A. Quality control is the responsibility of the Contractor, and the Contractor shall maintain control over construction and installation processes to assure compliance with specified requirements.

B. Means and methods of construction and installation processes are the responsibility of the Contractor, and at no time is it the intent of the Engineer to supersede or void that responsibility. In the event there is a degree of uncertainty that the process observed or planned will accomplish the required quality, the Engineer will refer to the Quality Control Plan and initiate discussion with the person primarily responsible for the process or installation in question.

C. Prepare and submit weekly Quality Control activity reports to the Engineer.

D. Monthly Quality Control Summaries are to be prepared and submitted to the Engineer with the Contractor's Partial Payment request for the respective period.

END OF SECTION

01510 TEMPORARY UTILITIES

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Provide temporary facilities required, which may include, but not limited to, the following:

1. Contractor's field office, telephone and storage sheds.

2. Temporary water service.

3. Temporary sanitary service.

4. Temporary electrical service.

B. For additional requirements on Temporary Facilities refer to Section 01100 “Special Project Requirements”.

C. Requirements of Regulatory Agencies:

1. Obtain and pay for permits as required by governing authorities.

2. Comply with federal, state and local codes and regulations.

1.0.2. TEMPORARY ELECTRICITY

A. The City will not furnish electric power for this project. All electrical driven equipment, including electrical welders, shall be served by the temporary electrical service to be provided by the Contractor.

B. The Contractor shall supply extension cords, ground fault circuit interrupters, and safety equipment necessary to protect his workmen and plant personnel.

C. The Contractor shall obtain a power source for temporary electricity from electrical generators or other approved means. Furnish, install and maintain temporary electric power service for construction needs throughout construction site as necessary.

1. Power centers for miscellaneous tools and equipment used in construction work.

2. Power for construction equipment.

3. Power for testing and checking equipment.

4. Power for welding units and for other equipment having special power requirements.

D. Capacity:

1. Adequate electrical service distribution for construction use by all trades and Field Offices during construction period.

2. Notify FPL if unusually heavy loads, such as welding, pumps, high service temporary pump, and other special power requirements, will be connected.

E. Maintain strict supervision of use of temporary services.

1. Enforce conformance with applicable standards.

2. Enforce safe practices.

3. Prevent abuse of services.

1.0.3. TEMPORARY SANITARY FACILITIES

A. Furnish, install and maintain temporary sanitary facilities for use throughout construction period.

1. Enclosed toilet facilities for construction personnel.

2. General employee washing facilities.

B. Toilet Facilities: Fixed or portable chemical toilets shall be provided wherever needed for the use of Contractor's employees. Toilets at construction sites shall conform to the requirements of Subpart D, Section 1926.51 of the OSHA Standards for Construction.

C. Minimum number of fixtures:

1. Toilets and Urinals:

For less than 20 employees: 1 toilet.
For 20 or more employees: 1 toilet and 1 urinal per 40 workers.

2. Washing Facilities: Adequate for number of employees, for type of work requiring washing facilities.

D. Maintain strict supervision of use of facilities:

1. Enforce conformance with applicable standards.

2. Maintain service and clean facilities.

3. Enforce proper use of sanitary facilities.

E. Cost of Installation and Operation:

1. Pay costs of temporary sanitary facilities, including costs of installation, maintenance and removal.

2. Costs of Water: As specified in Temporary Water.

3. Pay service charges for use of portable units.

F. Facility Locations:

1. Within the project site.

2. At Field Offices

3. Toilet and washing facilities:

Secluded from public observation.
Convenient for use of personnel in relation to work stations.

4. Obtain acceptance of the Engineer for all locations.

G. Enclosure for Toilet Facilities:

1. Weatherproof, sight proof, sturdy temporary enclosures.

2. Insect proof screening, adequate natural ventilation.

H. Sewer Connection: The Contractor shall coordinate with the City's Public Works Department for obtaining sewer connection and shall pay permit and sewer usage charges.

PART 2 – PRODUCTS 2.0.1.

MATERIALS

A. General: Materials may be new or used, but must be adequate for purpose required, must be sanitary and must not violate requirements of applicable codes. Materials in contact with potable water must be AWWA/NSF 61 listed.

2.0.2. ELECTRICITY

A. Provide required facilities, including transformers, conductors, poles, conduits, raceways, breakers, fuses and switches.

B. Provide appropriate enclosures for environment in which used, in compliance with NEMA standards.

2.0.3. DRINKING WATER FACILITIES

A. Portable Containers

1. Tightly closed and equipped with dispensing tap.

2. Clearly label contents.

3. Do not use for other purposes.

4. Provide single service disposable cups, with sanitary container for unused cups, and receptacles for used cups.

2.0.4. SANITARY FACILITIES

A. Toilet Facilities:

1. Portable toilets; either:

a. Chemical toilets.

b. Reticulating toilets.

c. Combustion toilets.

2. Toilet Tissue: Provide at each toilet, on suitable dispenser.

PART 3 – EXECUTION 3.0.1.

GENERAL

A. Obtain Engineer's approval of planned installations.

B. Install work in a neat and orderly manner.

C. Make structurally sound throughout.

D. Maintain to provide continuous service.

E. Modify and extend service as work progress requires.

3.0.2. TEMPORARY WATER

A. Locate piping and outlets.

1. Provide service convenient to work stations.

B. Avoid interference with:

1. Traffic and work areas.

2. Materials handling equipment.

3. Storage areas.

C. Do not run piping on floor or on ground.

D. When necessary to maintain pressure, provide temporary pumps, tanks and compressors.

3.0.3. TEMPORARY ELECTRICITY

A. Service and distribution may be overhead or underground.

B. Locate to avoid interference with:

1. Traffic and work areas.

2. Cranes.

3. Material handling equipment.

4. Storage areas.

C. Do not run branch circuits on floor or on ground.

D. Wire all safety devices required for operation of equipment.

E. Check operation of safety devices.

3.0.4. TEMPORARY SANITARY FACILITIES

A. Portable Toilets:

1. Erect securely and anchor to prevent dislocation.

2. Service as often as necessary to prevent accumulation of wastes and creation of unsanitary conditions.

B. Washing Facilities: Provide faucet

3.0.5. REMOVAL

A. Completely remove temporary materials and equipment upon completion of construction.

B. Clean and repair damage caused by installation and restore to specified or original condition.

END OF SECTION

01530 PROTECTION OF EXISTING FACILITIES

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The Contractor shall exercise extreme care and protect all existing structures and utilities, when working in proximity so as not to disturb the structures. Repair or replacement of any property and/or structures damaged during the construction of this project shall be the sole responsibility of the Contractor. Costs involved in the replacement or repair will not be reimbursed by the City. The Contractor shall be responsible for coordinating his work with the work to be done by FPL or their Contractor.

B. Protection of Property Remaining in Place:

1. Property obstructions which are to remain in place, such as buildings, poles, walls, posts, bridges, etc., are to be carefully protected from damage and are not to be displaced. Any damage to such obstructions noted to remain in place shall be repaired by the Contractor at no additional cost to the City or Owner.

2. Should structures be encountered which interfere with the work, the City or designee shall be consulted immediately in order for a decision to be made on the relocation of the work so it will clear the obstruction, if the obstruction cannot be relocated.

C. The underground utilities, structures and other facilities shown on the plans are located according to the best information available but may vary by several feet from both the position and elevation shown. The Contractor shall explore far enough in advance of his main trench to determine the exact location and condition of such utilities, structures or facilities so that, before the pipe is installed, the Engineer may change the line or grade of the pipe, should that become necessary to avoid a conflict.

1.0.2. GENERAL CONSIDERATIONS

A. All cost for changing the grade of the proposed main downward two feet-six inches or less in order to clear obstructions located differently than shown on the plans, or to

clear obstructions not shown on the plans but the location of which could have become known or should have become known by proper observation of field conditions or the proper exploratory procedure, shall be included in the prices bid under the various items of the Proposal and no additional compensation will be allowed.

B. Additional cost, if any, for changing the grade of the proposed main downward more than two feet-six inches, for the same reasons, will be paid for as "Extra Work" in accordance with "Extra Work and Payment Therefore" of the Special Conditions.

C. Changing the grade of the proposed main by rising deflections, or the alignment by horizontal deflections, will not be considered as extra work, or extra cost, to the Contractor, and in some cases a credit to the City may be warranted.

D. Where the Quotation contains Items for installing main in specific depth ranges, the main shall be paid for at the actual depth range installed. However, the provisions of paragraphs one and two of this Section shall apply and any depth increase caused by a lack of timely and sufficient exploration by the Contractor shall be at his expense. In such instance, the main shall be paid for as if installed at the invert elevations originally shown on the Plans.

E. In all cases where the main is deflected either horizontally or vertically, and the Engineer requires additional work and items such as paving, air release valve assemblies, and similar items for which a pay item was established in the Proposal, then such additional work and items will be paid for at the prices bid.

F. The Contractor shall determine the locations of recent additions to the systems not shown on the plans. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from his activities. The location of all overhead utilities shall be verified, and the Engineer notified of any conflict which might occur. The Contractor shall be responsible for determining which poles will need shoring during excavation and shall provide such shoring and support as is required.

G. Where it is necessary to temporarily interrupt house or building services, the Contractor shall notify the house or building owner or occupant, both before the interruption and again immediately before service is resumed. Before disconnecting any pipes or cables, the Contractor shall obtain permission from the Owner, or shall make suitable arrangements for their disconnection by the Owner. The Contractor shall be responsible for any damage to any such pipes, conduits or cables, and shall restore them to service promptly as soon as the work has progressed past the point involved.

H. Various drainage culverts and drainage ditches may be encountered along the route of the work. Any culverts which are disturbed, damaged or removed shall be repaired,

restored or reinstalled. The Contractor shall document any existing damage to the drainage systems, or if it needs cleaning, prior to doing any work in the vicinity, so he will not be held responsible. Drainage ditches shall be restored to the original cross sections existing prior to construction of this work. Ditches shall be left clean and free of all excavated materials or other materials deposited in them as a result of this construction. All existing headwalls, removed or damaged as a result of this construction, shall be restored as directed by the Engineer, and the work shall be considered an incidental item and the cost included in the other items of the quotation.

I. All existing drainage structures and piping shall be considered clean at the start of construction. The Contractor shall check to verify that this is so. The Contractor should notify the governing agency of any damaged or dirty structures or piping to avoid repair or cleaning at his expense. Copies of such notices shall be sent to the Engineer.

1.0.3. RELOCATION OF EXISTING UTILITIES

A. The relocation of existing utilities, as noted on the plans, or for the convenience of the Contractor shall be the responsibility of the Contractor. This work shall be completed by either the forces of the existing utility or the Contractor's forces at the discretion of the responsible utility. If the work is to be performed by the Contractor, all work shall be done in accordance with the utility company's requirements. Under no circumstances shall the Contractor be authorized extra payment for this work, and all cost for the relocation shall be the responsibility of the Contractor.

B. The Contractor shall also be responsible for the coordination of all existing utility relocations with the appropriate utilities. Where temporary supports or protective encasements are required during the construction, the Contractor shall be responsible for this work at no additional cost.

C. Any conflicts between the field investigation and the information shown on the plans shall be brought to the immediate attention of the Engineer. There shall be no additional payment for adjustments in grades or location resulting from locations of existing utilities.

D. Various storm sewer lines and inlets and slab-covered drainage ditches that conflict with the proposed construction may require adjustment, relocation or removal and reinstallation. This work shall be performed as directed by the Engineer, and the work shall be considered an incidental item and the cost included in the items listed in the quotation.

E. Representatives of utility companies, the railroad companies, the traffic and transportation authorities, etc., shall be notified in accordance with the provisions set forth in the relevant sections of the Specifications and the permitting documents.

F. Notify all utility companies that are affected by the construction operation at least fortyeight (48) hours in advance. Under no circumstance expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose and provide temporary support for all existing underground utilities and utility poles where necessary.

G. Absolutely no extra compensation will be allowed for construction problems created by utility poles of whatever size, overhead electric, telephone or other lines, whether shown on the Plans or not. The Contractor is solely responsible for discovering such items in the field prior to bidding and including all costs for such work in the prices bid.

1.0.4. PROTECTION OF UTILITIES TO REMAIN IN PLACE

A. The work area may have existing utilities, such as, but not limited to irrigation, phone, electrical, water, sewer, storm sewer, and gas lines. It shall be the responsibility of the Contractor to verify the location of all such utilities, structures, etc. by hand excavation or other appropriate measures before performing any work that could result in damage or injury to persons, utilities, structures, or property. The Contractor shall make a thorough search of the site for utilities before work is commenced in any particular location. The Contractor shall take special consideration to protect the existing water main, force main and power line along the project location to avoid service disruptions.

B. During construction, the Contractor shall protect the existing and proposed water main and force main using steel plates, as indicated in the drawings, until site work is completed and final grade is achieved. The Contractor shall be responsible for the repair of any damages caused to these pipes during construction at no additional costs to the City.

C. The Contractor shall take immediate steps to repair, replace, or restore all services to any utilities or other facilities which are disrupted at the fault of the Contractor. Further, the Contractor shall engage any additional outside repairs on a continuous “around the clock” basis until services are restored. The Contractor shall also provide and operate any supplemental temporary services to maintain uninterrupted use of the facilities. All costs involved in the repairs and restoring of disrupted service resulting from negligence on the part of the Contractor shall be borne by the Contractor and shall be fully responsible for any and all claims resulting from the damage.

D. Should utilities be encountered which interfere with the work, the City or designee shall be consulted immediately in order for a decision to be made on the relocation of the work so it will clear the obstruction, if the obstruction cannot be relocated.

E. Prior to the start of construction, the contractor shall comply with F.S. 553.851 for the protection of underground gas lines.

F. When power poles are adjacent to any proposed utility, the Contractor shall provide proper shoring or other suitable support during construction. The shoring and support methods shall be approved by the utility company engineering department. The cost of shoring will be included in the overall project cost.

G. The Contractor shall not purposefully disrupt or disconnect any type of utility whatsoever without first obtaining the written permission of the City. Requests for disconnection must be in writing and received by the City at least 72 hours prior to the time of the requested interruption.

1.0.5. PROTECTION OF TREES REMAINING IN PLACE

A. Construction can potentially damage the existing trees confined within the construction zone. Besides their aesthetic value, some trees are valuable and may be environmentally protected. Mangroves and mangrove associated species (as defined by Miami-Dade County Code of Ordinances) are the jurisdiction of MiamiDade County and would fall under the Miami-Dade County Code of Ordinances, Chapter 24, Division II.

B. Trees can be an important part of the ecological environment of the surrounding area. Measures should be in place to protect trees whenever necessary, including conservation of the canopy.

C. Where directed by the City, desirable trees within the roadway area shall be trimmed, protected, and left standing. Branches of trees extending over the area occupied by the roadway shall be trimmed as directed, to give clear height of 14 feet over vehicular areas and 8 feet over pedestrian areas.

D. When pruning cuts or root pruning to existing trees is shown in the Plans, work is to be supervised on site by an International Society of Arboriculture (ISA) or American Society of Consulting Arborists (ASCA) Certified Arborist and performed in accordance with American National Standards Institute (ANSI).

E. All trees found within a FDOT designated road shall comply with the appropriate FDOT index for tree protection barriers. All other tree protection shall be in accordance with the

F. For all areas both inside and outside the earthwork area, the Contractor shall not deface, injury, or destroy trees, nor remove or cut them without prior approval via a tree removal permit from the City of Opa-Locka Any accidental damage to a tree shall immediately be reported to the City of Opa-Locka for evaluation for public safety and possible new and additional permit requirements/work. An after-the-fact tree removal permit may be required.

G. The Contractor shall understand all ANSI tree care standards prior to the start of earthwork. All necessary permitted above and below ground tree work shall follow the appropriate ANSI standards for tree care.

H. Tree relocation, when required, shall be in accordance with CITY CODE

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The Contractor shall furnish all material, labor, tools, equipment, plant, appliances and services necessary to complete all demolition, modification and relocation work required in the drawings and specified herein. Examine the various drawings, visit the site and determine the extent of work affected therein and all conditions under which he is required to perform the various operations.

B. The Work specifically covered under this Section consists of the removal and disposal of existing structure, appurtenances, concrete pavement, concrete sidewalk, slope pavement, ditch pavement, curb and curb and gutter. The items to be removed shall be: (1) those items shown in the Plans to be removed; (2) those found within the limits of the area to be cleared and grubbed and directed by the City or designee to be removed; (3) those items which it is necessary to remove in order to construct new structures, utilities, and other appurtenances or obstructions which may be designated in the plans.

C. Demolition shall be constructed in such a way as to leave no obstructions to any proposed new structures or to any waterways. Pilings shall be pulled or shall be cut off or broken off at least 2 feet below the finish grade line. (In the event that the Plans indicate channel excavation to be done by others, the finish ground line shall be considered as the limits of such excavation.) For material which are to remain the property of the City or are to be salvaged for utilization in temporary structures, the removal shall be in such way as to avoid damage to such materials, and all bolts, nails, etc., shall be entirely removed from timbers to be so salvaged; also such salvaged structural steel members shall be marked for identification, as directed. Retaining walls and drainage structures are specifically not included in the Work covered under this Section.

1.0.2. GENERAL CONSIDERATIONS

A. Demolition, modification, removal and relocation work shall be coordinated with the City, shall be performed in an agreed upon sequence to minimize down time at the site.

B. Promptly remove all demolished materials and debris from the site. No demolished materials shall be kept at the plant site for more than 24 hours.

C. Demolition shall result in the complete removal and disposal of existing structures and appurtenances from the site as indicated on drawings and the cleanup after completion of the demolition work.

D. The cutting and removal of existing work necessary for modifications and installation of new work shall be made with a minimum of damage to the work that is to remain. Any damage done to existing facilities which are to remain shall be repaired at the Contractor's expense to the satisfaction of the City.

E. Surfaces of seals visible in the completed work shall be made to match as nearly as possible the adjacent surfaces.

F. Non-shrink grout shall be used for setting wall casting, sleeves, leveling pump bases, doweling anchors into existing concrete and elsewhere as required.

G. Follow other specific instructions for the modification work given in other sections of these specifications and/or as shown on the drawings.

H. Verify exact location, material, alignment, joint, etc. of existing piping and structure prior to making the modifications and connections called out in the drawings. The verifications shall be performed with adequate time to correct any potential alignment or other problems prior to the actual time of connection.

I. Dismantle and remove all existing equipment, piping and other appurtenances required for the completion of the work. Where called for or required, cut existing pipeline for the purpose of making connections thereto. Anchor bolts for equipment and structural steel removal shall be cut off one inch below the concrete surface. Surface shall be properly repaired and finished.

J. Where necessary or required for the purpose of making connections, cut existing pipelines in a manner to provide an approved joint. Where required, weld beads, flanges or provide the specified couplings, all as required.

K. Site shall be left in a clean condition satisfactory to the Engineer, free from demolished materials, rubbish or debris. Site shall be graded to meet adjacent contours and provide flow for surface drainage.

L. Restore items intended to remain that have been damaged by demolition work.

M. Items intended to remain that have been damaged by demolition work shall be restored to original or better condition.

N. All interrupted utility services shall be returned to service, and temporary services disconnected, unless otherwise specified. **PART 2 – PRODUCTS**

2.0.1. STRUCTURES TO BE REMOVED

A. The work specifically covered under this Section consists of the removal and disposal of the material from existing structures.

B. The structures to be removed shall be:

1. Those structures, or portions of structures, shown in the plans to be removed.

2. Those found within the limits of the area to be cleared and grubbed, and directed by the Engineer to be removed.

3. Those structures, or portions of structures, which it is necessary to remove in order to construct new structures, utilities and other appurtenances or obstructions which may be designated in the plans. **PART 3 – EXECUTION**

3.0.1. METHOD OF REMOVAL

A. The structures shall be removed in such a way as to leave no obstructions to any proposed new structures or to any waterways.

B. For material which are to remain the property of the City or are to be salvaged for utilization in temporary structures, the removal shall be in such way as to avoid damage to such materials, and all bolts, nails, etc., shall be entirely removed from timbers to be so salvaged; also such salvaged structural steel members shall be marked for identification, as directed.

3.0.2. REMOVAL OF EXISTING PAVEMENT

A. The work specified in this Section consists of removing and disposing of existing concrete pavement, concrete sidewalk, slope pavement, ditch pavement, curb and curb and gutter, where shown in the plans or directed by the Engineer to be removed or where required to be removed because of the construction operations.

B. Retaining walls and drainage structures are specifically not included in the work covered under this Division.

END OF SECTION

01550 SITE ACCESS AND STORAGE

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The culvert replacement work is to be performed along Sesame Street, between the intersections with Atlantic Avenue and NW 135th Street, Opa-Locka, Florida 33054. The project's owner is the City of Opa-Locka.

1.0.2. EXISTING UTILITIES

A. Protection of, and relocation of existing utilities, structures and other facilities shall be in accordance with Specification *"01530 - Protection of Existing Facilities".*

B. The relocation of existing utilities, as noted on the plans, or for the convenience of the Contractor, shall be the responsibility of the Contractor. This work shall be completed by either the forces of the existing utility or the Contractor's forces at the discretion of the responsible utility. If the work is to be performed by the Contractor, all work shall be done in accordance with the utility company's requirements. The Contractor shall also be responsible for the coordination of all existing utility relocations with the appropriate utilities. Where temporary supports or protective encasements are required during the construction, the Contractor shall be responsible for this work at no additional cost. Under no circumstances shall the Contractor be authorized extra payment for this work, and all cost for the relocation shall be the responsibility of the Contractor.

C. Any conflicts between the field investigation and the information shown on the plans shall be brought to the immediate attention of the Engineer.

1.0.3. SITE ACCESS AND STORAGE

A. The City reserves the right to enter upon, and to use, any and all portions of the work performed hereunder (or under its other Contracts), whether completed or not, as may be required.

B. Highway Limitations: The Contractor shall make its own investigation of the condition of available public and private roads and of clearances, restrictions, bridge load limits,

and other limitations affecting transportation and ingress and egress to the site of the work. It shall be the Contractor's responsibility to construct and maintain any haul roads required for its construction operations.

C. Temporary Crossings: Continuous, unobstructed, safe, and adequate pedestrian and vehicular access shall be provided to fire hydrants, parking lots, Vehicular access to all production facilities shall be maintained except when necessary construction precludes such access for reasonable periods of time.

D. Street Use: Nothing herein shall be construed to entitle the Contractor to the exclusive use of any public street, alleyway, or parking area during the performance of the work hereunder and it shall conduct its operations to not interfere unnecessarily with the City or any other authorized work of utility companies or other agencies in such streets, alleyways, or parking areas. No street shall be closed plant operations without first obtaining permission of the Engineer and the City. Where excavation is being performed in any streets, one lane shall always be kept open to traffic, unless otherwise indicated. Toe boards shall be provided to retain excavated material if required by the Engineer or the City. Fire hydrants on or adjacent to the work shall be kept accessible to fire-fighting equipment. Temporary provisions shall be made by the Contractor to assure the use of sidewalks and the proper functioning of gutters, storm drain inlets, and other drainage facilities.

E. Additional Facilities: Access to other facilities within the project site shall be allowed by the Contractor for City’s staff conduct their operation and maintenance activities. Continuous, unobstructed, safe and adequate pedestrian and vehicular for the City’s staff to access facilities within the project site such as the electrical building, emergency generator, water tanks and Pump Station 23 is required.

1.0.4. CONTRACTOR WORK AND STORAGE AREA

A. The Contractor may utilize private warehouse and/or office space as a storage area and/or construction field offices.

B. The Contractor shall submit to the Engineer for approval, a proposed plan and layout for all field offices, temporary facilities, and parking both for on the project site and on any additional lands obtained by the Contractor for its use during construction of the project. Prior to commencing any preparation remove, relocate and protect where necessary all existing underground and above ground facilities, pipelines, sprinkler systems, sod and all other existing installations. All these installations shall be restored to their initial conditions.

C. The Contractor shall construct and use a separate storage area for hazardous materials used in constructing the work.

1. For the purpose of this paragraph, hazardous materials to be stored in the separate area are products labeled with any of the following terms: Warning, Caution, Poisonous, Toxic, Flammable, Corrosive, Reactive, or Explosive. In addition, whether or not so labeled, the following materials shall be stored in the separate area: diesel fuel, gasoline, new and used motor oil, hydraulic fluid, cement, paints and paint thinners, 2 part epoxy coatings, sealants, asphaltic products, glues, solvents, wood preservatives, sand blast materials, and spill absorbent.

2. Hazardous materials shall be stored in groupings according to the Material Safety Data Sheets.

3. Contractor shall develop and submit to the Engineer a plan for storing and disposing of the materials above.

4. Contractor shall obtain and submit to the Engineer a single EPA number for wastes generated at the site.

5. The separate storage area shall meet the requirements of authorities having jurisdiction over the storage of hazardous materials.

6. Hazardous materials that are delivered in containers shall be stored in the original containers until use. Hazardous materials delivered in bulk shall be stored in containers which meet the requirements of authorities having jurisdiction.

1.0.5. PARKING

A. The Contractor shall be responsible for making its own arrangements for parking of its direct employees, Subcontractors, vendors, etc. as may be necessary either on site or offsite.

B. Traffic and parking areas shall be maintained in good conditions, free of excavated material, construction equipment, mud, and construction materials. The Contractor shall repair breaks, potholes, low areas which collect standing water, and other deficiencies.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01560 TEMPORARY ENVIRONMENTAL CONTROLS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. For any work conducted in a contaminated area within the project boundaries where hazardous materials or hydrocarbons have been encountered, were previously known to exist, or is suspected by the Contractor or the City Inspector, the Contractor must comply with all applicable requirements of OSHA, EPA, FDEP, Miami-Dade County Regulatory and the City.

B. All work defined by this Division, including work less than one (1) acre in size, that has the potential to impact the City's Municipal Separate Storm Water System (MS4), and/or adjacent properties, is required to employ sediment and erosion control measures that are in accordance with Florida Storm Water Erosion and Sedimentation Control Inspector's Manual, latest revision, and in accordance with Miami-Dade County Department of Environmental Resources Management.

C. All construction activity that results in the disturbance of equal to or greater than one (1) acre is required to obtain coverage under the Florida Department of Environmental Protection's Generic Permit for Storm Water Discharge from Large and Small Construction Activities (CGP).

1.0.2. SPECIALIZED CONSTRUCTION AREA

A. Specialized construction areas are defined as areas where contaminants are discovered and require construction by personnel qualified by training and equipped with personal protective equipment for such work.

B. Work in specialized construction areas shall be carried out by personnel qualified by training and equipped for such activities. These personnel shall be either Subcontractors with licensing and certification as specialists in this type of construction or the Contractor's own personnel who have taken and been certified as having

passed the required training course(s). Licensing and certifications shall be submitted to the City for verification and shall in all cases be satisfactory to both, the City and other authorities with jurisdiction.

1.0.3. DUST ABATEMENT

A. All permittees, contractors, owners, operators, or other persons involved in construction activities shall refer to applicable sections of Local, State, and Federal regulations on dust control for additional guidance, including but not limited to the Miami-Dade County Code of Ordinances.

B. All persons involved in construction activities shall take measures to control dust from operations and prevent spillage of excavated materials on public roads.

C. All persons involved in construction activities shall remove spillage of excavated materials, debris, and dust from public roads by methods approved by the City or designee.

D. All persons involved in construction activities shall provide temporary dust-proof partitions where required to protect unaltered portions of existing structures and facilities and as directed by the City or designee. Temporary partitions shall be provided where demolition work is required to protect equipment and material and shall consist of plastic sheeting (6 mil).

E. All persons involved in construction activities shall apply water at locations, quantities, and frequencies required by the City or designee to control dust for nuisance prevention to the City and properties in the vicinity of the site. The frequency of watering will be determined by weather conditions and the erodibility of the soil. If additives in the water are used to increase its dust suppression properties, the chemical should have no adverse environmental impact on adjacent water bodies.

F. The Contractor shall prevent its operation from producing dust in amounts damaging to property or causing a nuisance to persons occupying buildings in the vicinity of the project Site. The Contractor shall employ measures to prevent fugitive dust. The Contractor shall be responsible for any damage resulting from dust originating from its operations.

G. Storage Piles: Enclose, cover, water (as needed), or apply non-toxic soil binders according to manufacturer's specifications on material piles (i.e. gravel, sand, dirt) with a silt content of 5 percent or greater.

H. Active Areas of Site: Water active construction areas and unpaved roads as needed and as requested by Engineer to prevent the propagation of dust.

I. Inactive Areas of Site: Apply non-toxic soil stabilizers according to manufacturer's specifications to inactive construction areas, or water as needed to maintain adequate dust control.

J. Vehicle Loads: Cover or maintain at least 2-feet of freeboard vertical distance between the top of the load and the top of the trailer sides on trucks hauling dirt, sand, soil, or other loose materials off of the site.

K. Roads: When there is visible track-out onto a paved public road, install wheel washers where the vehicles exit and enter onto the paved roads and wash the undercarriage of trucks and any equipment leaving the site on each trip. Sweep the paved street at the end of each shift with a water spray pick-up broom-type street sweeper as necessary or as directed.

L. Vehicle Speeds: Maintain vehicle speeds to 10 mph or less.

M. Additional dust control BMPs include but are not limited to the following.

1. Prevention of dust generation is preferable to applying dust suppression measures. Ensure in the project schedule that the area of cleared land is minimized during the drier months of the year, when dust generation is at its greatest.

2. The soil shall be maintained in a sufficiently damp condition to prevent loose grains of soil from becoming dislodged. The soil shall be completely crusted over by application of water or completely covered with clean gravel or treated with an approved dust suppressant.

3. Ensure that smooth surfaces are deep ripped and left rough and cloddy to reduce the wind velocity at the soil surface.

4. Construct wind fences if appropriate for the site. As a contingency measure, in areas that do not have access to a water supply, water stored on-site should never be less than fifty percent of disturbed land surface. Wherever watering is used to suppress dust, ensure it does not create contaminated runoff that will contaminate surface waters.

5. Use barriers where required to prevent the migration of sawdust or particulates from sanding or surface preparation activities during construction.

1.0.4. SEDIMENTATION ABATEMENT

A. The Contractor shall be responsible for collecting, storing, hauling, and disposing of spoil, silt, and waste materials in compliance with applicable federal, state, and local rules and regulations and the Contract Documents.

B. Install and maintain erosion and sediment control measures, such as swales, grade stabilization structures, berms, dikes, waterways, filter fabric fences, and sediment basins.

C. Filter fabric barrier systems, if used, shall be installed in such a manner that surface runoff will percolate through the system in sheet flow fashion and allow sediment to be retained and accumulated.

D. Remove and dispose of sediment deposits at the designated spoil area. If a spoil area is not indicated, dispose of sediment off-site at a location not in or adjacent to a stream or floodplain. Sediment to be placed at the spoil area should be spread evenly, compacted, and stabilized. Sediment shall not be allowed to flush into a stream or drainage way.

E. Maintain erosion and sediment control measures until final acceptance or until requested by the Engineer to remove it.

1.0.5. RUBBISH CONTROL

A. During the progress of the work, the Contractor shall keep the site and other areas for which it is responsible in a neat and clean condition and free from any accumulation of rubbish. The Contractor shall dispose of rubbish and waste materials of any nature and shall establish regular intervals of collection and disposal of such materials and waste. The Contractor shall also keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Disposal of rubbish and surplus materials shall be off the site in accordance with local codes and ordinances governing locations and methods of disposal and in conformance with applicable safety laws and the requirements of Part 1926 of the OSHA Safety and Health Standards for Construction.

B. It is important to maintain the construction site in a neat and satisfactory condition during the during construction and after construction has been completed. B. During construction, the Contractor shall regularly clean up all rubbish, surplus materials, and the adjacent areas affected. Unneeded construction equipment should be removed and all damages repaired so that the public and property owners will be inconvenienced as little as possible.

C. Any material or debris that has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes structures, or elsewhere during the course of the Contractor's operations must be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc., should, upon completion of the Work, be left in a clean and neat condition.

D. The Contractor shall perform the cleanup work on a regular basis and as frequently as ordered by the City or designee. Basic site restoration in a particular area shall be accomplished immediately following the installation or completion of the required facilities in that area. Furthermore, such work shall also be accomplished, when ordered by the City or designee, if partially completed facilities must remain incomplete for some time period due to unforeseen circumstances.

E. Upon failure of the Contractor to perform periodic clean up and basic restoration of the site to the City or designee's satisfaction, the City or designee may, upon five (5) days prior written notice to the Contractor, employ such labor and equipment as it deems necessary for the purpose, and all costs resulting there from shall be charged to the Contractor and deducted from amounts of money that it may be due.

F. On or before the completion of the Work, the Contractor shall tear down and remove all temporary buildings and structures; remove all temporary works, tools, and machinery or other construction equipment; remove, acceptably disinfect, and cover all organic matter and material containing organic matter in, under, and around houses and other buildings; remove all rubbish from any grounds which has been occupied; and leave roads and all parts of the premises and adjacent property affected by work operations in a neat and satisfactory condition.

G. Upon completion of the Work, the Contractor shall remove from the sites of the subsurface explorations all plant, machinery, tools, equipment, temporary work, and surplus materials; remove all rubbish from any grounds which has been occupied; and leave the roads and all parts of the premises and adjacent property affected by work operations in a neat and satisfactory condition.

H. The Contractor shall thoroughly clean all materials and equipment installed, and, upon completion of the Work, deliver it undamaged and in fresh and new-appearing condition. All mechanical equipment should be left fully charged with lubricant and ready for operation.

I. The Contractor shall restore or replace, when and as directed by the City or designee, any public or private property damaged by work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of

operations. To this end, perform as required all necessary highway or driveway, walkway, and landscaping work. Suitable materials, equipment, and methods should be used for such restoration. The restoration of existing property or structures should be done as promptly as practicable as work progresses and should not be left until the end of the contract period.

1.0.6. SANITATION

A. Toilet Facilities: Fixed or portable chemical toilets shall be provided wherever needed for the use of employees. Toilets shall conform to the requirements of Part 1926 of the OSHA Standards for Construction.

B. Sanitary and Other Organic Wastes: The Contractor shall establish a regular daily collection of sanitary and organic wastes. Wastes and refuse from sanitary facilities provided by the Contractor or organic material wastes from any other source related to the Contractor's operations shall be disposed of away from the site in a manner satisfactory to the Engineer and in accordance with Laws and Regulations pertaining thereto.

1.0.7. CHEMICALS

A. Chemicals used on the work or furnished for facility operation, whether defoliant, soil sterilant, herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, shall show approval of either the U.S. Environmental Protection Agency or the U.S. Department of Agriculture. Use of such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer.

1.0.8. ADDITIONAL ENVIRONMENTAL CONSIDERATIONS – AFFECTED SOIL

A. Excavation of affected soil shall be accomplished as described in Section 02220 “Excavation – General".

B. Affected soil must be placed on an impermeable barrier when temporarily stockpiled. All stockpile leachate or runoff must be collected for disposal in accordance with applicable federal, state, and local regulations. Soils designated for removal and disposal shall be prepared for shipment, transported, and disposed of in accordance with the requirements of this Section.

C. Affected soils shall be processed at a state licensed facility. These soils shall be transported and disposed of in accordance with federal, state, and local regulations. The Owner shall be responsible for all soil analyses required for transportation and disposal.

D. The Owner shall be responsible for testing soil which has been incinerated to certify the treated soil meets applicable federal, state, and local regulations for final disposal.

E. Free Petroleum Product

1. Some free petroleum products which may be partly or entirely diesel fuel or gasoline may be encountered during excavation or removal of affected soil. The Contractor shall remove free petroleum product, if necessary, when a separate floating phase greater than 0.10-inch thick is present as required by health and safety considerations. The free petroleum product shall be removed by skimming, pumping to an oil/water separator, or other approved methods. The Contractor shall take reasonable precautions to ensure that solids are not entrained in the pumping process.

2. Free petroleum products shall be transported and disposed by the Owner in accordance with federal, state, and local regulations. The Owner is responsible for any laboratory analyses required for disposal of the free petroleum products.

F. Transport and Disposal

1. Transport Regulations: The Owner shall be responsible for the loading, labeling, placarding, marking, weighing, and transport of all waste materials in accordance with the Florida Department of Transportation Regulations, and U.S. Department of Transportation Regulations. The Owner shall use only transporters that are licensed and competent to haul these wastes.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01581 PROJECT SIGNS

PART 1 – GENERAL 1.0.1

SCOPE OF WORK

A. Project Signs

1. City's Responsibility: To supply, erect and remove signs.

2. Contractor Responsibility: To maintain signs and restore site.

PART 2 – PRODUCTS 2.0.1

PROJECT SIGNS

A. The City will supply signs for this Project. These signs will be produced, installed, and at the end of construction, removed by City's forces. During the construction period, the Contractor shall maintain the signs in good condition, satisfactory to the Engineer. Should the signs be defaced, damaged or destroyed, the Contractor shall be responsible for their repair or replacement to the satisfaction of the Engineer and no extra compensation will be allowed.

PART 3 – EXECUTION 3.0.1

MAINTENANCE

A. Maintain signs and supports and repair all damages to the satisfaction of the Engineer.

B. Restore site to original condition upon completion of Project.

END OF SECTION

01600 MATERIALS AND EQUIPMENT SHIPPING, HANDLING, STORAGE AND PROTECTION

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. This shall include both the City and Contractor supplied material and equipment.

B. The Contractor is to inform all Subcontractors, suppliers, and manufactures of the requirements herein specified and shall include expenses for the following services in his costs for compliance with the requirements hereinafter specified.

1.0.2. PREPARATION FOR SHIPMENT

A. When practical, equipment shall be factory-assembled. The equipment parts and assemblies that are shipped unassembled shall be furnished with assembly plan and instructions. The separate parts and assemblies shall be factory matchmarked or tagged in a manner to facilitate assembly. All assemblies are to be made by the Contractor at no additional cost to the City.

B. Machined and unpainted parts subject to damage by the elements shall be protected with an application of a strippable protective coating, or other approved protective method.

C. Equipment shall be packaged or crated in a manner that will provide protection from damage during shipping, handling, and storage.

D. The outside of the package or crate shall be adequately marked or tagged to indicate its contents by name and equipment number, if applicable; approximate weight; state any special precautions for handling; and indicate the recommended requirements for storage prior to installation.

1.0.3. PACKING AND DELIVERY OF SPARE PARTS AND SPECIAL TOOLS

A. Properly mark to identify the associated equipment by name, equipment, and part number. Parts shall be packaged in a manner for protection against damage from the elements during shipping, handling, and storage. Ship in boxes that are marked to indicate the contents. Delivery of spare parts and special tools shall be made prior to the time associated equipment is scheduled for the initial test run.

1.0.4. SHIPMENT

A. All equipment and material shall be shipped with freight and shipping paid FOB jobsite.

B. The Contractor shall request a 7-day advance Notice of Shipment from manufacturers, and, upon receipt of such notice, provide the Engineer with a copy of the current

delivery information concerning equipment items and material items of critical importance to the project schedule.

C. Schedule delivery to reduce long term on-site storage prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from the Engineer.

D. Coordinate delivery with installation to ensure minimum holding time for items that are hazardous, flammable, easily damaged or sensitive to deterioration.

1.0.5. RECEIVING

A. The Contractor shall unload and record the receipt of all equipment and materials at the jobsite.

B. All costs for receiving, inspection, handling, storage, insurance, inventory control, and equipment maintenance for both for both the Contractor-supplied and the Citysupplied materials and equipment shall be included in the prices bid and no extra compensation will be allowed.

1.0.6. INSPECTION

A. Immediately upon receipt of equipment and materials at the jobsite, the Contractor shall inspect for completeness and any evidence of damage during shipment. Should there appear to be any shortage or damage, the Engineer shall be immediately notified; and the Contractor shall be fully responsible for informing the manufacturers and the transportation company of the extent of the shortage or damage. If the item or items require replacing or supplying missing parts, the Contractor shall take the necessary measures to expedite the replacement or supply of the missing parts.

1.0.7. HANDLING

A. Equipment and materials received for installation on this project shall be handled in accordance with the manufacturer's recommendations, and in a manner that will prevent damage.

B. Pipes shall always be handled with great care to avoid damage. In loading and unloading, they shall be lifted with cranes or hoists or slid or rolled on skidways in such

a manner as to avoid shock. Under no circumstances shall this material be dropped or allowed to roll or slide against obstructions. No cables, lifting arms, hooks or other devices shall be inserted into the pipe or fitting. All lifting, pulling or pushing mechanisms shall be applied to the exterior of the pipe. Pipe and other material shall be distributed along the right-of-way in advance of installation only to the extent approved by the Engineer. Pipe shall be stored on blocking or timber. It shall not be stored on rocks, boulders, or other supports which in the opinion of the Engineer are unsuitable. Such materials shall be so placed as to keep obstruction to traffic to a minimum.

1.0.8. STORAGE AND PROTECTION

A. Equipment and materials shall be stored prior to installation as recommended by the manufacturer. Generally, materials such as pipe shall be stored off the ground in approved storage yards or along the line of the proposed pipeline as approved by the Engineer. Items subject to the damage by the elements, vandalism, or theft shall be stored in secure buildings.

B. Store and protect products in accordance with the manufacturer's instructions, with seals and labels intact and legible. Storage instructions shall be studied by the Contractor and he shall review them with the Engineer. Instructions shall be carefully followed and a written record of this kept by the Contractor. Arrange storage to permit access for inspection.

C. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

D. Cement and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All structural, miscellaneous and reinforcing steel shall be stored off the ground or otherwise to prevent accumulations of dirt or grease, and in a position to prevent accumulations of standing water and to minimize rusting. Beams shall be stored, the webs vertical. Precast concrete shall be handled and stored in a manner to prevent accumulations of dirt, standing water, staining, chipping or cracking. brick, block and similar masonry products shall be handled and stored in a manner to reduce breakage, cracking and spalling to a minimum.

E. All bolts, nuts, gaskets and other joint materials for use in pipelines shall be stored under cover.

F. Gaskets shall be stored in their original packing bags or containers, and care shall be exercised to keep them away from heat, light, oil gasoline or other petroleum products. Gaskets shall be kept clean at all times and not handled with greasy or dirty hands.

G. Plastic pipe and other elastomeric products shall be stored under cover to preclude damage by ultraviolet radiation even if the product has UV inhibitors in its compound.

1.0.9. INSURANCE

A. The Contractor's insurance shall adequately cover the value of materials delivered but not yet incorporated into the work. The Contractor and the City shall be named as coinsured insofar as their respective interests may appear. Proof of this coverage must be submitted to the Engineer at the time request for progress or partial payments.

1.0.10. INVENTORY CONTROL

A. Equipment and materials shall be stored in a manner to provide easy access for inspection and inventory control. The Contractor shall keep a running account of all materials in storage to facilitate inspection and to estimate progress payments for materials delivered but not installed in the work.

1.0.11. EQUIPMENT MAINTENANCE PRIOR TO THE CITYACCEPTANCE

A. Provide the required or manufacturer's recommended maintenance during storage, during the installation, and until such time as the City accepts the equipment for fulltime operation.

1.0.12. SALVABLE EQUIPMENT

A. Any salvable pipe, or other miscellaneous material or equipment removed during construction and not reused in the work shall be cleaned, hauled, and stored by the Contractor at his own expense, where directed by the Engineer, and shall remain the property of the City. All other material shall be disposed of by the Contractor at his own expense.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01700 PROJECT CLOSEOUT

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Work Included: This section outlines the procedure to be followed in closing all contracts.

1.0.2. RELATED SECTION

A. Section 01340 “Shop Drawings, Product Data, and Samples”.

B. Section 01720 “Project Record Documents”.

C. City of Opa-Locka General Covenants and Conditions.

1.0.3. FINAL INSPECTIONS

A. The City will not issue preliminary punch lists. After final cleaning and upon written notice from the Contractor that he has inspected the work and it is a 100% completed, the Engineer will make a preliminary inspection with the City and the Contractor present. Upon completion of this preliminary inspection, the Engineer will submit to the Contractor a written final punch list of any which this inspection reveals as defective or incomplete work.

B. Upon receiving written notice from the Engineer, the Contractor shall immediately undertake the work required to remedy the defects and complete the work to the satisfaction of the City.

C. Each item in the punch list shall have a time duration agreed upon by both parties which shall not exceed 10 calendar days. Punchlist items may be eliminated individually from the list when approved by the Engineer.

D. Should the Engineer find all work satisfactory at the time of the inspection, the Contractor will be allowed to make application for final payment in accordance with the provisions of the General Covenants and Conditions.

1. If the Contractor fails to complete any item of work within a time period equal to 100% of the agreed upon duration of time for all individual items, the Engineer will notify the Contractor in writing specifying the conditions pertaining thereto and

directing the Contractor to comply with his directive. If the Contractor has not corrected such condition within 5 days of such notice, it shall be sufficient grounds for the Engineer to order the subject items discontinued and have them completely remedied in a timely manner at the expense of the Contractor.

2. No final estimate shall be issued by the Engineer until the Engineer has assured himself that the punch list has been 100% finished and all other related documents are submitted.

1.0.4. FINAL SUBMITTALS

A. The Contractor shall submit all closeout documents required by the Contract Documents, including but not limited to the following.

1. Warranties and guarantees

2. Test reports, including but not limited to:

a. Concrete test results certified by a licensed testing laboratory

3. Inspection and acceptance records

4. Operating and maintenance manuals

5. Project record documents

6. Permit closeout documentation

1.0.5. FINAL PAYMENT APPLICATION

A. Final payment application must include:

1. Final releases of liens from all subcontractors and suppliers

2. Final release from Contractor

3. Final consent of surety bond

4. The Contractor must obtain final Greenspace Management approval for installed landscaping

5. Upon receipt of Final Payment, the Contractor shall execute the Form of Final Receipt, if applicable

1.0.1. GUARANTEES, BONDS, AND AFFIDAVITS

A. No Contract will be finalized until all guarantees, bonds, certificates, licenses, roofing warranty, C.O. and affidavits required for work or equipment as specified are satisfactorily filed with the Engineer.
B. The Contractor shall comply with the Public Records Laws of the State of Florida.

1.0.2. ACCESSORY ITEMS

A. All Contractors furnishing and/or installing equipment and spare parts on this project shall provide to the City, upon acceptance of the equipment, all special accessories required to place each item of equipment in full operation.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01710 CLEANING

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This Section specifies the maintenance of the work site in a clean, orderly, hazard free condition.

1.0.2. QUALITY ASSURANCE

A. Conduct cleaning and disposal operations in accordance with local ordinances and anti-pollution laws. Rubbish, volatile wastes, and other construction wastes shall be neither burned nor buried on the work site, and shall not be disposed of into storm drains, sanitary drains, streams or other waterways.

B. Final cleaning shall be accomplished either by workmen experienced in cleaning operations or by professional cleaners.

PART 2 – PRODUCTS

1.0.1. ON SITE WASTE CONTAINERS

A. Provide on-site waste containers for collection of waste materials, debris and rubbish. See Section 01100 “Special Project Requirements”, Subsection 1.0.4. regarding Safety Requirements for environmentally hazardous materials.

1.0.2. CLEANING MATERIALS

A. Cleaning materials shall be as recommended by the manufacturer of the surface to be cleaned.

PART 3 – EXECUTION 1.0.3.

SAFETY REQUIREMENT

A. Maintain work site in accordance with local ordinances and anti-pollution laws applicable to work site cleanliness and in a neat, orderly and hazard-free condition until final acceptance of the work. Catwalks, accessible underground structures, work site sidewalks and walkways adjacent to the work site shall be kept free from hazards caused by construction activities.

B. Store volatile wastes including rags in covered metal containers and remove from work site daily.

C. Prevent accumulations of wastes which create hazardous conditions.
D. Artificially ventilate spaces which are not naturally ventilated when volatile or noxious substances are present in those spaces.

1.0.4. CLEANING DURING CONSTRUCTION

A. The Contractor shall at all times during the execution of this Contract keep the work site free and clear of all rubbish and debris. As soon as the work is completed, the accumulated rubbish or surplus materials shall be promptly removed. The Contractor shall also restore in an acceptable manner all property, both public and private, which has been displaced or damaged during the prosecution of the work and shall leave the site and vicinity unobstructed and in a neat and presentable condition.

B. In the event of delay exceeding two (2) days after written notice is given to the Contractor by the Engineer to remove such rubbish or materials or to restore displaced or damaged property, the Engineer may employ such labor and equipment as he may deem necessary for the purpose, and the cost of such work, together with the cost of supervision, shall be charged to the Contractor and shall be deducted from any monies due him. The Project shall not be considered as having been completed until all rubbish and surplus materials have been removed and disposed of properly.

C. Perform cleaning every workday for duration of the work. Structures, grounds, and areas of the work site, access roads and adjacent public and private properties shall be maintained free from accumulations of waste materials and rubbish caused by construction operations on the work site. Place waste materials and rubbish in on site containers or as otherwise approved. Unneeded construction equipment shall be removed and all damaged repaired so that the public and property owners will be inconvenienced as little as possible.

D. Remove or secure loose material on open decks and on other exposed surfaces at end of each day's work or more often to maintain work site in hazard-free condition.

E. Prevent dislodgement of materials due to wind and other forces. Wet down dry materials and rubbish to lay dust and prevent blowing dust. Cover or wet excavated material leaving and arriving at the site to prevent blowing dust. Clean the public access roads to the site of any material falling from the haul trucks.

F. Empty on-site waste containers whenever necessary so that trash overflow does not occur. Legally dispose of contents at either public or private dumping areas.

G. Control the handling of materials, debris and rubbish; do not drop or throw from heights.

H. Immediately remove spillages of construction-related materials from hauling routes.

1.0.5. FINAL CLEANING

A. In addition to the cleaning performed above, in preparation for final inspection, remove grease, dust, dirt, rust stain from surfaces. Remove labels, fingerprints and other foreign materials from exposed exterior finished surfaces. Flush down all valve boxes, and areas leaving such surfaces clean of all sand, etc.

B. In preparation for final acceptance or occupancy, conduct final inspection and cleaning of exposed exterior surfaces, and of concealed spaces.

C. Maintain cleaning operations until project has been finally accepted.

END OF SECTION

01711 FINAL ACCEPTANCE

PART 1 – GENERAL

1.0.1. FINAL CLEANUP

A. At the completion of work and immediately prior to final inspection, cleaning of the entire project shall be accomplished according to the following provisions:

1. All temporary utility drops, fencing, and water supply outlets shall be removed.

2. All plant gate identification signs, barricades, tools, rubbish collection receptacles and other such items shall be removed by the Contractor.

3. All remaining earthen stockpiles of excess excavated material shall be graded to provide gentle slopes to prevent erosion as directed by the Engineer.

1.0.2. FINAL INSPECTION

A. Following final cleanup, the Contractor shall request an inspection by the Engineer, and Engineer of Record. If the Engineer accepts the work as being complete, then Final Acceptance shall be given to the Contractor in accordance with Contract.

1.0.3. FINAL ACCEPTANCE

A. Following successful final inspection, the Engineer shall approve the work as being complete and provide final acceptance of the work in accordance with the Contract.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

01720 PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor is responsible for maintaining one record copy of:

1. Record Drawings. Record Drawings as used herein shall mean a drawing that reflects construction or design changes.

2. Record Specifications.

3. Addenda.

4. Change Orders and other modifications of the Contract.

5. Engineer's written orders or instructions.

6. Approved Shop Drawings (including product data and samples).

7. Field test records.

8. Construction photographs.

9. As-built dimensions and elevations as recorded on a daily basis by the Contractor's Professional Surveyor and Mapper (PSM) licensed to practice in the State of Florida.

10. Field Book. Survey Field notes taken by the PSM's survey crew (copy provided to the Engineer on a monthly basis)

11. The records listed above are always to be made available for the Engineer's review for all projects.

B. Vertical Datum: Nationwide, surveys and as-builts are in the process of conversion to NAVD 88 from the NGVD 1929. The City will accept NAVD 88 datum with a conversion factor on each page. The Florida Department of Transportation is using the NAVD 88 datum. Projects within FDOT roadway limits shall either use NAVD 88 datum or provide a conversion factor on each page if the NGVD 1929 datum is used. For projects using City of Miami datum provide a conversion factor on each page to the NAVD 88 datum.

1.0.2. MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Maintain documents in a clean dry, legible, condition and in good order. Do not use record documents for construction purposes.

1.0.3. REQUIRED MEASUREMENTS

A. Set-up and Verification: The Contractor's PSM is required to recover the design baseline and verify the elevations and coordinates on a regular basis as needed.

B. The Contractor is required to have a level instrument setup next to the construction site in order to control the vertical alignment of the pipe installation prior to trench backfilling. The level shall be setup daily for use by the surveyor, Contractor's foreman and City Engineer/Inspector. Any underground construction work that does not have a level properly setup will be stopped by the City Engineer/Inspector.

C. The Contractor is required to have the PSM's survey crew record the field information on a daily basis when there is underground pipe installation. The survey crew shall be on-site as needed to record and verify the information before it is covered. Any underground construction work that does not have the information recorded by a survey crew will be stopped by the City Engineer/Inspector. The Engineer/Inspector has the authority to order re-excavation of work that was covered without accurate survey measurements.

D. Field Book Information: The PSM is required to have his crews make daily visits to the Project site during underground pipe installation work to perform field measurements of the Contractor’s daily installations. This information shall be recorded in field books. Copies of the field notes are required to be provided to the Construction Manager on a monthly basis. The PSM's field notes shall be submitted to the City along with partial as-built plans (signed and sealed) on a monthly basis as a condition of payment.

1.0.4. RECORDS

A. During the life of the Contract the Contractor shall retain the services of a PSM who shall maintain daily records of the installation, including all deviations from Plans and Specifications and for the purposes of preparing and submitting to the City an asbuilt/record survey in compliance with:

1. Florida Statutes Chapter 472.027.

2. Florida Administrative Code Chapter 5J-17.050, 5J-17.051 and 5J-17.052.

3. As further required by these Contract Documents.

B. Measure and Record all information for all projects concurrently with constructions progress.

1. The services of the PSM for the Project shall be retained by the Contractor prior to the issuance of the "Notice to Proceed." A letter from the PSM shall be provided at the Preconstruction Meeting indicating that the Contractor has secured his services to perform all survey work for the duration of the project and prepare final as-builts plans.

C. Redline Drawings:

1. The Contractor shall maintain full size (22-inches by 34-inches) redline drawings to reflect the "record" items of work as the work progresses.

2. At a minimum, the redline drawings shall be reviewed on the 20th working day of every third month, or more often, as deemed necessary by Consultant, after the month in which the final Notice-to Proceed is given as well as on completion of Work. Failure to maintain the redline drawings up-to-date shall be grounds for withholding monthly progress payments until such time as the redline drawings are brought up-to-date.

3. Redline drawings shall be accessible to the City or designee at all times during construction period.

4. The cost of maintaining record changes, and preparation of the as-built record drawings shall be included in the unit prices bid for the affected items.

D. Label each document “PROJECT RECORD” in neat large printed letters.

1. Do not conceal any work until as-built information is recorded by the Contractor’s surveyor and, if so required, by the City surveyor.

2. All locations for future connections or tie-ins shall be left unburied and uncovered until the Contractor’s PSM measures and records the as-built information.

a. All as-built and inspector information is to be made available to the Engineer daily for inclusion in the City records.

3. Restrained pipe, end line valves, thrust blocks shall be left uncovered for the last complete length. In line valves and tees shall be left exposed for one length on both sides plus the face end. Measure and record the elevation, horizontal and vertical alignment, and inclination for these items.

4. For all projects, the Contractor’s PSM shall maintain exact and extensive records of any deviations from the plans or specifications. These records shall be satisfactory to the Engineer, who’s decision shall be final, and enough to allow the production of accurate as-built plans which correctly and completely portray the work as constructed.

5. For all projects, the Contractor's PSM shall record data as follows during the entirety of construction:

    a. For facility (e.g. a water or sewage plant, pumping station, or similar site if so, designated by City) projects, record as-built dimensions and elevations every twenty-five feet or portion thereof along the pipeline and at every abrupt change in direction of the new line.

    b. For pipeline projects, constructed in the public right-of-way dimensions and elevations every one-hundred feet or portion thereof along the pipeline and at every horizontal and vertical change in direction.

    c. In all cases record locations and elevations for each valve, fitting, service line, fire hydrant, water sampling point, utility poles adjacent to the proposed line, overhead wires crossing the ditch line (approximate height above grade) and other appurtenances along the pipeline.

    d. The identity, dimensions, location and elevation of any existing utility crossing the proposed line and so immediately adjacent to the new line as to be exposed by the excavation shall also be recorded. Locate, excavate expose and record the same data for any utility shown in the plans whose proximity to the proposed pipeline could affect the certification requirements of the new installation. Note that in instances of a very wide ditch due to ground conditions the recording of data for adjacent, paralleling, utilities shall only be required for lines which come within three (3) feet of the outside of the pipe being installed unless otherwise ordered by the Engineer who's decision shall be final.

    e. Without exception, for all thrust blocks, the top elevation, outer dimensions, thickness of the block, length and location of any sheet piling, if used, shall be recorded by the Contractor's PSM.

    f. Specific locations and elevation of equipment, the buildings and miscellaneous items installed inside them shall be recorded as applicable and as required by the Engineer.

    g. Without exception, where the substitution of another piece of equipment for that shown on the plans has been allowed, the footprint, clearance and elevation dimensions shall be recorded by the Contractor's PSM and these changes shall be accurately and thoroughly portrayed on the as-built plans.

    h. The Contractor's Licensed PSM shall prepare from the field data, as-built record drawings showing correctly, completely and accurately the installation, embracing all changes and deviations made during construction, including all construction variances, to reflect the work as it was constructed.

    i. Record Drawings shall be prepared as specified hereinafter.

1) Record Drawings shall be prepared as specified herein.

2) Record Drawings and five (5) copies shall be signed and sealed by the PSM and shall be submitted to the City for the Engineer's review within ten (10) calendar days following the completion date of successful pressure testing of all mains and appurtenances under this Contract.

j. If the Engineer determines that the drawings are not acceptable, they will be returned to the Contractor with a cover letter noting the deficiencies and/or reasons for the disapproval. Contractor shall have ten (10) calendar days to correct all exceptions taken by the Engineer and resubmit as-built record drawings to the Engineer for final acceptance.

1.0.5. DRAWINGS

A. During the life of the Contract, maintain records of all deviations from the plans and specifications and prepare therefrom As-Built Record Drawings showing correctly and accurately all changes and deviations made during construction to reflect the work as it was actually constructed. It is the responsibility of the Contractor to check the AsBuilt Record Drawings for errors and omissions prior to submittal to the City and certify in writing that the As-Built Record Drawings are correct and accurate, including the actual location of all piping including building exposed and internal piping, electrical/signal conduits in or below the concrete floor, Indicate the size, depth and voltage in each conduit.

B. Legibly Mark to Record Actual Construction: All data as previously specified for all installations by the Contractor's . For on-site structures and facilities work the Contractor's Florida Registered Land Surveyor shall record:

1. Depths of various elements of foundation in relation to datum plane.

2. All exposed and underground piping and ductwork with elevations and dimensions and locations of valves, pull boxes, etc. Changes in location, Horizontal and vertical locations of underground utilities and appurtenances, measured from permanent reference points, plant survey grids, property lines and similar.

3. Location of internal utilities and appurtenance concealed in the construction shall be referenced to visible and accessible features of the structure. Air conditioning ducts with locations of dampers, access doors, fans and other items needing periodic maintenance.

4. Field changes in dimensions, locations and details.

5. Changes made by Engineer's written instructions or by Change Order.

6. Details not on original plans.

7. Equipment and piping relocations.

8. Major architectural and structural changes in structures, including tanks.

9. Architectural schedule changes according to Contractor's record and shop drawings.

10. Record drawings shall be prepared as specified hereinafter.

C. Specifications and Addenda: Legibly mark each section to record the following:

1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment installed.

2. Changes made by Engineer's written instructions or by Change Order.

D. Approved Shop Drawings: Provide record copies for system diagrams and drawings together with each element of process equipment, piping, electrical system and instrumentation system.

1.0.6. SUBMITTALS

A. Accompany submittal with transmittal letter in duplicate, containing:

1. Date

2. Project title and number

3. Contractor's name, address and phone number

4. Title and number of each Record Document

5. Contractor signature or of its authorized representative.

B. Record Drawings with five blue line copies which have been signed and sealed by the surveyor shall be submitted to the City for the Engineer's review. Drawings shall conform to recognized standards of drafting and the minimum technical standards as set forth by the Board of Professional Surveyors and Mappers, shall be neat, legible and on 24-inch by 36-inch Mylar. These materials shall be submitted to the City for the Engineer's review as a prerequisite for payment during the course of construction as previously specified and final, complete sets of documents within ten calendar days following the completion date of successful testing of all mains, equipment and

appurtenances under this Contract. Final payment will not be made until the set of asbuilt record drawings and five sets of blue-line prints have been approved and accepted by the Engineer.

C. In cases where a portion of a pipeline system or parts of a process system are put into service, the above conditions shall apply for the in-service portion and monthly payments shall be withheld until the as-built drawings are accepted by the Engineer.

D. As-Built Record Drawings, as prepared by the Contractor's Florida Registered Land Surveyor and submitted by the Contractor, shall comply with following criteria and standards, and as specified in Section 01725 “As-built Drawings”:

1. Title block must show the Contract or Project Title (as applicable); Contract number; City project number (if applicable); Contractor's name; Engineer of Record's name; Surveyor's name and address; date; location; and where appropriate to the work, size and type (i.e. water main, sanitary gravity main, sanitary force main) of main.

   a. Baselines or centerlines must be tied to section corners, monument line and right-of-way lines.

   b. Pipeline must be tied to baseline or centerline with stations and offsets.

   c. Baselines or centerlines must show bearings or deflection angles, or delta, radius, chord and arc length for curves.

   d. Show all horizontal curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

   e. Stationing must be the same as shown on construction drawings and must be tied to Section corners, centerline intersections and all other pertinent control points within the project. All such pertinent points shall have their stationing shown and where there is dual stationing for a point, both stations shall be called out.

   f. Identify all streets by name or number and show stationing at all intersecting streets.

   g. Refer to vertical datum plane and identify the location, elevation and source supplying the benchmark used.

   h. Tie easement lines to survey baseline or platted centerline and rights-of-way.

   i. Show horizontal and vertical locations of all pipes, deflections, or any significant change of direction.

j. Elevations of natural ground or pavement over the pipeline must be shown at each position where the pipe elevation is shown and at intervening high and low points.

k. Show all invert and bottom elevations of culvert piping. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the culvert being constructed.

l. Locations and elevations together with diameter and material of all pipes.

m. Coordinate values used inside plants shall be the local, City established coordinate systems referenced to the property boundary.

E. Update of Construction Documents:

1. All "proposed" information shall be removed from as-builts, leaving only "as-built" information reflected in drawing.

2. Upon completion of the Work, the Contractor shall furnish the Consultant the asbuilt record drawings. Pay request quantities must match as-builts record drawings. The completed as-built record drawings shall be delivered to the Consultant at least 48 hours prior to final inspection of the work. The final inspection will not be conducted unless the as-built record drawings are in the possession of the Consultant.

3. The City reserves the right to have a Registered PSM perform spot checks of asbuilt information provided by the Contractor. The City shall pay the costs of such survey work when the work is performed by a City of Opa-Locka Contractor. Should any spot checks indicate that any portion of the installation does not comply with the Contract Documents, a recheck shall be performed by another (or third) Registered PSM or agreed to by both the City and Contractor at the Contractor's expense. If the recheck confirms the first check, that portion of the work shall be removed and replaced or modified at no additional cost to the City until satisfactory compliance is attained.

F. Certification: The Contractor shall certify on as-built record drawings all other actual constructed details and information as may be required by the City including but not limited to:

1. Pipeline must be identified by type of pipe material and manufacturer.

2. Types and sizes of sheeting and piling together with measured and complete; location, dimensional and elevation data on any pile caps, tie backs, anchors, whalers or other appurtenant structures left in place.

26.0 Digital Records: The City reserves the right to require submittal of as-built drawings in AutoCAD format and in PDF format. The AutoCAD file shall be compatible with the City's system and capable of being uploaded without external reference files. Graphical information contained on electronic media shall be the same as provided on plan sheets. Digital Records shall be delivered to the office of the City Engineer, Engineering Division, Opa-Locka Public Works Department at 12950 NW 42 Ave in OpaLocka, FL 33054.

G. . A letter of transmittal shall be provided, containing a list of all files and data being provided.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION 01725 AS-BUILT DRAWINGS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This section shall serve to set out guidelines for as-built drawings submitted to City of Opa-Locka.

B. To ensure that as-built drawings may serve their intended purposes now and in the future, they should be prepared with consideration for quality. The City of Opa-Locka Public Works Department will consider the following elements during as-built during review to ensure the quality of the as-built drawings.

C. The Contractor is required to have a survey crew record the field information on as necessary when there is underground pipe installation. The Florida Licensed Professional Surveyor and Mapper shall be responsible for providing measurements accurate to the standard of practice established in Chapter 5J-17.050 to 5J-17.052 of the Florida Administrative Code, pursuant to Section 427.027, Florida Statutes. The approved final record as-built shall be used as part of the City of Opa-Locka's GIS and Record System.

D. The Contractor's PSM shall maintain exact and extensive records of any deviations from the design plan set.

E. As-built drawings shall be prepared in a professional manner consistent with common engineering standards for layout, lettering, and line-work.

F. As-built information shall be portrayed in a manner that is readily understandable by someone not familiar with the specific job.

G. Preparer shall endeavor to present as-built information clearly without "cluttering" the drawing.

H. As-built drawings shall include all disciplines in the Bid Set drawings.

1.0.2. CRITERIA FOR AS-BUILTS

A. Horizontal: All horizontal control and locations shall be tied to the Florida State Plane Coordinate System, East Zone (NAD 83/2011).

B. Vertical Datum: All vertical control and elevations shall be referenced to North American Vertical Datum of 1988 (NAVD 1988).

1.0.3. AS-BUILT REVIEW PROCESS

A. SUBMITTAL PACKAGE

The following shall be submitted as one package in order to be accepted for initial review by the Inspections Unit.

1. Initial submittal (prior to performing field testing) shall include the following: 1 set of signed and sealed as-built (DWFX file), signed and sealed field book information, DWFX file of the as-built and the City Minimum Requirements As-built Plan Submittal.

2. Final submittal shall consist of corrected As-Built Documents in digital format (AutoCAD and DWFX files) and the following sets of signed and sealed as-builts sets:

Five (5) sets.
Signed and Sealed Copy of Field Book Information.
As-builts signed and sealed by the Florida Licensed Professional Surveyor and Mapper and/or Engineer of Record must comply with format requirements.

B. CITY PROCESSING.

1. The City will require Ten (10) business days to perform the as-built review.

2. As-builts will be initially checked by the responsible Field Inspector to verify that they are an accurate representation of the work as installed and that the job as shown is complete and in accordance with the permitted plans.

3. Following the Field Inspector's review, as-builts will be reviewed in depth by the AsBuilt Reviewer to ensure compliance with these standards. The Reviewer will also check the complete package which includes the Bill of Materials.

C. PUNCH LIST

1. Punch List items may be generated from the City initial review. Successive reviews are solely for the purpose of ensuring that original punch list items are completely and correctly done to obtain a final As-built acceptable to the City.

2. Successive punch list items may only be added to correct a problem resulting from submitter's efforts to comply with the original punch list. No new original punch list item(s) may be added. Submitter shall be required to make these successive changes.

3. In the case of an oversight on the part of the As-built Reviewer, punch list items may be added to the list or requested of the submitter after the valid time for such items. The City requires that all corrections be made as a condition of accepting the final as-builts.

4. Marking of the drawings shall be kept current and shall be done at the time the material and equipment are installed. Annotations to the Contract Documents shall be made with an erasable colored pencil conforming to the following color code:

Additions - Red
Deletions - Green
Comments - Blue Dimensions
- Graphite*

*Legibly mark to record actual depths, horizontal and vertical location of all above and below grade structures, underground pipes, valves, raceways, cables, and appurtenances referenced to permanent surface improvements.

1.0.4. AS-BUILTS SUBMITTAL REQUIREMENTS

A. GENERAL REQUIREMENTS

1. Prior to final acceptance, two (2) copies of as-built drawings certified by a Florida Registered Land Surveyor shall be provided to the City for approval, acceptance and certification by the “Engineer of Record”, together with a copy of digital media producing such As-Builts.

2. At minimum, the As-Built must show Station numbers and horizontal offsets from the Base Line and Right-of-Way lines on a Plan scaled 1”=20 ft. for all fittings, valves and changes in horizontal alignment, and a profile with a vertical scale of not less than 1” = 2 ft. with elevations at all horizontal and vertical changes in alignments and grade profile elevations at approximately 50 ft.

3. As-Built plans and profiles must also show all abandoned pipes and plugs that were modified within the project limits and actual elevation/description of all other utilities crossing or encountered in the vicinity of the new water mains. The paper size of the drawings shall be 22”X 34”.

4. Any deviations from the design plans must be approved by the City.

B. QUALITY OF AS-BUILTS

To ensure that as-builts may serve their intended purposes now and in the future, they should be prepared with consideration for quality. The As-built Reviewer will consider the following elements to ensure the quality of as-builts.

1. Accuracy: The Contractor is required to have a survey crew record the field information on as necessary when there is underground pipe installation. The Florida Licensed Professional Surveyor and Mapper shall be responsible for providing measurements accurate to the standard of practice of the Florida Administrative Code. The approved final record as-built shall be used as part of the City GIS and Record System.

2. Field Changes: The Contractor’s PSM shall maintain exact and extensive records of any deviations from the design plan set.

3. Appearance: As-builts shall be prepared in a professional manner consistent with common engineering standards for layout, lettering and line-work.

4. "Understandability": As-built information shall be portrayed in a manner that is readily understandable by someone not familiar with the specific job.

5. Clarity: Preparer shall endeavor to present as-built information clearly without "cluttering" the drawing.

1.0.5. AS-BUILT CONTENT REQUIREMENTS – ALL DRAWINGS

A. All drawings submitted to the City of Opa-Locka Public Works Department shall include at a minimum the following, where applicable.

1. Centerlines, right-of-way lines, right-of-way dimensions, street widths and names, with matching plat, if applicable, subdivision name, phaseline, and number. (Phasing to be nearest valve and manhole in limits of phase area).

2. Baselines, monuments, monument lines, lot lines, parcel lines.

3. All involved lots and blocks shown and correctly designated (to match plat).

4. All control lines identified (i.e., centerline, section line, etc.). Identify all streets by name or number and show stationing at all intersecting streets.

5. Baseline shall be tied to centerlines, boundary lines, section corners, or to monument lines or to right-of-way lines. Baselines must show bearings or deflection angles, or delta, radius, chord, and arc length for curves.

6. Pipeline installation shall be tied to a baseline that easily identified on the existing or proposed right-of-way. Baseline shall not be on top of the main except for gravity sewers installed on centerlines.

7. Show all existing water, sewer and/or stormwater mains as a broken line (i.e., dashed). Show proposed utility as dark solid line. Also, identify respective utility pipe, size, and material type. Existing or proposed mains 20-inches in diameter and greater, shall be shown as two lines (i.e., double line) of the line type as stated.

8. Show all horizontal and vertical curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

9. Easements:

    a. Easements type and size shall be clearly shown with size and tied to centerline. The easements shall be separate for water, sewer, force main, and pump stations.

    b. Existing Official Record Book (ORB) or other record information must be shown.

    c. Easement lines shall be tied to the centerline of the main.

10. Separate profile for each segment and utility type (water, sanitary sewer, stormwater, etc.).

11. Every utility (water, sewer, sewer laterals, water services, gas, electric, stormwater, telecommunication, duct banks, etc.) encountered and/or crossing drainage, water, or sanitary sewer facilities (whether it is a conflict or has sufficient clearances) shall be located, both horizontally and vertically. The clearance between the facilities

horizontal and vertical, shall be noted. For instance, if a 2inch gas main crosses over the top of a 6-inch potable water main, the bottom elevation of the gas main shall be noted and the top of the water main shall be noted. The difference between the two facilities will be the clearance between the two facilities. Parallel mains shall note the clearance between the outside of the mains. It shall be the Contractor's responsibility to note these crossings on a daily basis and ensure that this information is reflected on the As-Built Drawing plan set. Crossings will not require state plane coordinates.

12. All utilities shall be stationed and all facilities labeled. Drawings shall show stations for all services. Lengths and distances for service runs shall also be given.

13. Clearly show and label what is new and what is existing at the tie-in points.

14. Show all outlets, stub-outs, sewer lateral, water service and any other relevant information. Identify the size, material, length, direction, and elevation (top of pipe for water, sewer, and stormwater and force mains, invert gravity sewer and stormwater mains).

15. Elevations of natural ground or pavement over pipelines shall be shown at each position where the pipe elevation is shown at least every 100 feet.

16. Manhole rim and valve box manhole rim elevations shall be shown.

17. Show all invert and bottom elevations in manholes and valve vaults or boxes. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the pipeline being constructed.

18. Locations, elevations, and size of all casings shall be shown.

19. Locations and top and bottom elevation of all sheeting, including sheeting left in place, shall be shown.

20. Provide State Plane Coordinate values for all visible features such as valves, manholes, maintenance access structures, fire hydrants, water meters, cleanouts, and backflow preventers. Also provide State Plane Coordinate values for existing valves and manholes at points of connection or closest to the point of connection and the point of connection itself.

21. Lines that are abandoned in place shall be located during construction and clearly identified (dashed and bold line type) on the drawings to include cut and plug locations and pipe material.

1.0.6. AS-BUILT CONTENT REQUIREMENTS – PAVING, GRADING, AND DRAINAGE DRAWINGS

A. Paving, grading, and drainage drawings shall include at a minimum the following, where applicable.

1. All existing and proposed utilities in the public right-of-way shall be shown on the paving, grading, and drainage plans. All utilities shall be identified and located by dimension, horizontally and by elevation, and their materials of construction shall be noted to the extent determinable without excavation.

2. Cross-section(s) and/or typical section(s) of proposed road and drainage construction, shall show dimensions, materials, and purposes of all existing (to remain) facilities as well as all proposed facilities within the right-of-way.

3. Pavement marking and signing drawings shall include sign locations.

B. All rock elevations for parking lot, roadways, and swale areas shall include at a minimum the following.

1. Rock elevations at all high and low points, and at enough intermediate points to confirm slope consistency and every 50 feet for roadways.

2. Rock elevations shall be taken at all locations where there is a finish grade elevation shown on the design plans.

3. All catch basin and manhole rim elevations shall be shown.

4. Elevations around medians will also be required.

5. Elevations shall be taken on all paved and unpaved swales prior to placement of asphalt and/or topsoil/sod, at enough intermediate points to confirm slope consistency and conformance to the plan details.

C. Retention area elevations shall be taken at the bottom of the retention area and at the top of bank. If there are contours indicated on the design plans, then they shall be asbuilt as well.

1.0.7. AS-BUILT SURVEY

A. An as-built survey will be required upon completion of all construction projects that lay within City-owned properties, including, but not limited to, City rights-of-way, easements, parcels, and submerged lands, etc. All improvements, including but not limited to, landscaping will be required.

B. As-built surveys shall be prepared in accordance with FAC Chapter 5J-17.051 and all applicable Standards of Practice.

C. When performing as-built surveys, the surveyor and mapper shall obtain field measurements of vertical or horizontal dimensions of constructed improvements so that the constructed facility can be delineated in such a way that the location of the construction may be compared with the construction plans.

D. As-built survey maps shall clearly show by symbols, notations, or delineations, those constructed improvements located by the survey.

E. The vertical and horizontal accuracy of the measurements made shall be such that it may be determined whether the improvements were constructed consistent with planned locations.

F. The Surveyor shall be responsible for the location, establishing or replacement of Vertical and Horizontal Survey Control Points.

G. Complete topographic and boundary survey for the project shall be signed and sealed by the Florida Licensed Professional Surveyor and Mapper as part of the as-built plans. All information required of a boundary survey shall be contained on the as-built plans to include the legal description of the site, easements and rights-of-way abutting the site and location of all surface facilities recorded by a PSM. All utilities within the property shall be properly shown, along with their associated elevation and clearance.

1.0.8. CERTIFICATION

A. All as-built drawings are to be certified to the City of Opa-Locka Public Works Department and all sheets are to be signed and sealed as previously outlined.

B. As-builts shall include a signed, sealed, and dated certification statement by the responsible Florida Licensed Professional Surveyor and Mapper that all measurements were recorded under his direction and are accurate.

C. Any civil drawings that are not surveyed shall also be included in the set and shall be signed and sealed by the Engineer of Record.

D. As-builts that contain electrical, mechanical, or structural work shall also be signed and sealed by the Engineer of Record to indicate that the work was constructed as designed.

E. It is the responsibility of the Contractor to check the as-builts for errors and omissions prior to submittal to the City and certify in writing that the as-builts are correct and accurate, including the actual location of all piping including building exposed and internal piping, electrical/signal conduits in or below the concrete floor, indicate the size, depth, and voltage in each conduit.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Prepare Operating and Maintenance (O & M) Manual covering all equipment and systems provided under this project.

B. Instruct the City's personnel in the operation of equipment and maintenance provided under this project.

C. This Section covers the services of the manufacturer's representatives and special coordinating services required of the Contractor that shall apply during construction, facilities startup, and training of the City's personnel for facilities operation.

D. The Contractor shall inform all Subcontractors and manufacturers of the requirements herein and include the following services in his costs for the work. Where a minimum amount of time is stated in the Technical Specifications for manufacturer's services, any additional time required to perform the specified services shall be at no additional cost to the City.

1.0.2. SUBMITTALS

A. Not later than 30 days after the start of Construction, submit for review and approval by the Engineer two copies of a preliminary draft of the O&M manual, showing the proposed format and an outline of the contents.

B. Throughout construction, prepare O&M sections for equipment and systems when such equipment and systems, and shop drawings and technical data therefor, are approved. Within 30 days following receipt of the Engineer’s approval of the final shop drawing submittal, submit, in duplicate, draft of complete O&M Manual for review and approval of Engineer.

C. Within 30 days after receipt of Engineer’s review comments, make required revisions and submit in final form two copies of the O & M Manual for final approval.

D. The Contractor shall inform all Subcontractors and manufacturers of the requirements herein and include the following services in his costs for the work. Where a minimum amount of time is stated in the Technical Specifications for manufacturer's services, any additional time required to perform the specified services shall be at no additional cost to the City.

1.0.3. FORM, FORMAT AND SUBMITTALS CONTENTS

A. Operating and maintenance manuals will be used for use by the City personnel in the operation and maintenance of the various systems.

B. The City shall be furnished with one set of any special tools required for servicing for each type of equipment actually furnished. These tools shall be provided to the Pump Station Maintenance Division.

C. Prepare data in the form of an instructional manual for use by the City personnel.

D. Format:

1. Size: 8½ in. x 11 in.

2. Paper: 20-pound minimum, white, for typed pages.

3. Text: Manufacturer's printed data or neatly typewritten.

4. Drawings:

a. Provide reinforced punched binder tab, bind in with text.

b. Fold larger drawings to the size of the text paper.

5. Provide fly-leaf for each separate product, or each piece of operating equipment.

a. Provide typed description of product, and major component parts of equipment.

b. Provide indexed tabs.

6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:

a. Title of Project.

b. Identify of separate structure as applicable.

c. Identity of general subject matter covered in the manual.

E. Binders

1. Commercial quality three-ring binders with durable and cleanable plastic covers.

2. Maximum ring size: As required (Minimum 1½-inches).

F. Content of Manual

1. Neatly typewritten table of contents, arranged in a systematic order.

    a. Contractor, name of responsible principal, address and telephone number.

    b. A list of each product required to be included, indexed to the content of the volume.

    c. List, with each product, the name, address and telephone number of:

        1) Subcontractor or installer.

        2) Maintenance Contractor, as appropriate.

        3) Identify the area of responsibility of each.

        4) Local source of supply for parts and replacement.

        5) Identify each product by product name and other identifying symbols as set forth in Contract Documents.

G. Product Data:

1. Include only those sheets which are pertinent to the specific product.

2. Annotate each sheet to:

    a. Clearly identify the specific product or part Installed.

    b. Clearly identify the data applicable in the installation.

    c. Delete references to inapplicable information.

H. Drawings:

1. Supplement product data with drawings as necessary to clearly illustrate:

    a. Relations of component part of equipment and system.

    b. Control wiring, schematic wiring, and flow diagram.

2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.

3. Do not use Project Record Documents as maintenance drawings. I. Written text, as required to supplement product data for the particular installation:

1. Organize in a consistent format under separate headings for different procedures.

2. Provide a logical sequence of instructions for each procedure.

J. Copy of each warranty, bond and service contract issued.

1. Provide information sheet for City's personnel, give:

a. Proper procedures in the event of failure.

b. Instances which might affect the validity of warranties or bonds.

1.0.4. MANUAL FOR EQUIPMENT AND SYSTEMS

A. Content, for each unit of equipment and system, as appropriate:

1. Description of unit and component parts.

a. Function, normal operating characteristics, and limiting conditions.

b. Performance curves, engineering data and tests.

c. Complete nomenclature and commercial number of all replaceable parts.

2. Operating Procedures:

a. Start-up, break-in, routine and normal operating instructions.

b. Regulation, control, stopping, shut-down, and emergency instructions.

c. Special operating instructions.

3. Maintenance Procedures:

a. Routine operations.

b. Guide to "trouble shooting".

c. Disassembly, repair, and reassembly.

d. Alignment, adjusting, and checking.

4. Servicing and lubrication schedule:

a. List of lubricants required.

5. Manufacturer's printed operating and maintenance instructions.

6. Description of sequence of operation by control manufacturer.

7. Original manufacturer's parts list, illustration, as drawings and diagrams required for maintenance.

a. Predicted life of parts subject to wear.

b. Items recommended to be stocked as spare parts.

8. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.

9. Other data as required under pertinent sections of specifications.

B. Content, for each electric and electronic system, as appropriate:

1. Description of system and component parts

a. Function, normal operating characteristics, and limiting conditions.

b. Performance curves, engineering data and test.

2. Switchgear, transformers, and motor control centers.

a. Coordination summary.

b. Relay settings.

c. High voltage switch instructions.

d. High voltage cable termination and splice instructions.

3. Operating procedures:

a. Routine and normal operating instructions.

b. Special operating instructions.

4. Maintenance procedures:

a. Routine operations.

b. Guide to “trouble-shooting”.

c. Disassembly, repair and reassembly.

d. Adjust and checking.

C. Prepare and include additional data when the need for such data becomes apparent during instruction of City's personnel.

D. Additional requirements for operating and maintenance data: The respective sections of Specification.

1.0.5. SUBMITTAL OF MANUALS

A. Two draft copies of the complete operating and maintenance manual shall be submitted for review by the Engineer within 30 calendar days after approval of all shop drawings. One copy will be return to the Contractor within 30 days after receipt by the Engineer.

1.0.6. POSTED OPERATING INSTRUCTIONS

A. General: Operating instructions and diagrams shall be prepared for posting near the equipment. Posted operating instructions shall be photographic or equal non-fading reproductions framed under glass encased in non-discoloring plastic and shall be mounted in location directed. Copies of the posted operating instructions shall also use with the operating and maintenance manuals as a basis in training employees in the operation and maintenance of systems and related equipment installed.

B. Contents: Posted operating instructions shall consist of simplified, consolidated equipment, control and power diagrams graphically representing the entire system and actual equipment installed, including concise written instructions on how to start and stop systems, what settings and conditions are to be observed and what control adjustments are to be made or maintained by the operation.

1.0.7. MANUFACTURES’S NAMEPLATES

A. Each major component of equipment to have manufacturer's name, address, model number and rating on a plate securely affixed in a conspicuous place. Nameplate of a distributing agent will not be acceptable in lieu of manufacturer's nameplate.

B. Nameplate shall be die-stamped, engraved, or etched to guarantee long term legibility.

1.0.8. GUARANTY/WARRANTY

A. The Contractor shall guarantee that all new equipment has the capacity specified and that it will operate without excess noise or vibration.

B. Contractor shall furnish a written guarantee covering all workmanship and materials for a period of one (1) year, from the date of acceptance. This shall include an agreement to repair or replace, at his expense, all defects that may appear in that time, which in the opinion of the Engineer, are due to defective workmanship or materials.

C. Copies of factory warranties on all equipment furnished shall be submitted with the above described, written guarantee period, and included in maintenance manuals.

1.0.9. OPERATING AND MAINTENANCE RESPONSIBILITY

A. Contractor shall provide all required service and maintenance on all equipment installed under this contract for one (1) year following final acceptance or the beginning of beneficial use by the City. The starting date of one (1) year service period shall be determined by the City. Included in the service and maintenance to be provided during this one (1) year period, shall be the following:

1. All required lubrication, adjusting belt tensions, eliminating excessive noise and vibration.

2. Correcting all electrical and mechanical faults, recording all permanent installed gauge meter and temperature readings.

3. General service items, including the answering of service calls.

B. Service during construction:

1. General: Competent and experienced technical representatives shall represent the manufacturers of all equipment and systems as many days as may be necessary to resolve assembly or installation problems at the worksite which are attributable to, or associated with, the equipment furnished. This requirement applies to manufacturers of all equipment furnished, whether or not specifically set forth in the Technical Specifications.

2. Manufacturer's Certificate of Proper Installation: Where called for in the Technical Specifications, the manufacturer's representative shall provide a certificate stating that the equipment or system has been installed in accordance with the manufacturer's recommendation and has been inspected by a manufacturer's authorized representative, that it has been serviced with the proper initial lubricants, that applicable safety equipment has been properly installed, and that the proper electrical and mechanical connections have been made.

C. Functional testing assistance:

1. Where functional (or run) testing is called for on the Technical Specifications, the manufacturer's representative shall assist with the initial test, which shall include checking for proper rotation, alignment, speed, excessive vibration, and noisy operation. Initial equipment and system adjustment and calibrations shall be performed in the presence of and with the assistance of the manufacturer's representative. The previously specified Manufacturer's Certificate of Proper Installation shall include the statement that proper adjustment has been made and that the equipment or system is ready for plant startup and operation.

2. The Contractor, as applicable to the equipment furnished, shall state in writing that all necessary hydraulic structures, piping systems, and valves have been successfully tested; that all necessary equipment systems and subsystems have been checked for proper installation, started, and successfully tested to indicate that they are all operational; that the systems and subsystems are capable of performing their intended functions; and that the facilities are ready for startup and intended operation.

3. Training of Owner's Personnel:
   Where called for in the specifications, the manufacturer's representative shall provide detailed instructions to the City personnel for operation and maintenance of the specified equipment. These training services shall include pre-startup classroom and onsite equipment instruction and/or post-startup classroom and onsite equipment instruction, as stated in the specifications.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Where the City has obtained various permits for this Project, copies will be appended at the rear of the Specifications.

B. The Contractor shall familiarize himself with, and comply with, all requirements of these permits and their issuing authorities. All other necessary permits shall be obtained by the Contractor.

C. The Contractor's particular attention is called to any special conditions of the permits relating to construction procedures, excavation and backfill requirements, open trench restrictions, asphalt concrete pavement restoration, turbidity controls, and all other general and special conditions. In the event any of the conditions of the permits are in conflict with the requirements of these Specifications, the more stringent conditions of the permits shall take precedence.

D. Any deviations from the Plans, Specifications or permits appended thereto, must first be approved by the Engineer even if approval for the change has been given by the permitting agency.

E. The Contractor shall assume throughout the life of the Contract all obligations and responsibilities imposed on the City as permittee of the aforementioned permits. All expenses necessary for compliance with the regulations and requirements of each permitting agency and its permit shall be borne by the Contractor and shall be included in his overall bid price.

F. The cost of any fees such as impact fees, inspection fees, etc. and the cost paid for all required permits shall be borne by the City. The Contractor shall pay the required fees, obtain the permit(s) and then upon submission of proof of cost to the City, be reimbursed for said cost out of the Permit Fee Dedicated Allowance Item. This shall apply only to required permits and fees. Permits obtained or fees paid for the advantage of the Contractor or non-required permits obtained for whatever reason shall not be reimbursed. The necessity or non-necessity of a permit or fee shall be determined by the Engineer whose word shall be final. As specified in the paragraph above, all costs of compliance with the permit(s) shall be borne by the Contractor and included in his bid price.

G. All surveying required by the Project permits shall be done by the Contractor's Registered Professional Surveyor and Mapper (PSM) licensed to practice in the State of Florida.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor shall be responsible for providing the Engineer with Maintenance of Traffic (M.O.T.) plans for lane closures and/or detours for approval. These M.O.T. plans shall be produced by an individual employed by the Contractor and certified as "Work Zone Traffic Safety Supervisor" by the American Traffic Safety Service Association, ATSSA.

B. The Contractor shall be responsible for the maintenance of public streets and traffic control for the duration of the project. The cost of Traffic Control including the cost of any required off duty police officers shall be included under the appropriate bid item in the Proposal. If no bid item for this is included, said costs shall be included in other appropriate items of the bid and no extra compensation will be allowed.

1.0.2. REGULATIONS

A. As used herein, any reference to City of Opa-Locka, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over areas or streets, or their departments, published regulations, permits or data. The Contractor shall abide by all applicable laws, regulations, and codes thereof pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.

1.0.3. MAINTENANCE OF TRAFFIC (M.O.T.)

A. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control, and other provisions throughout the Project as required by the City of Opa-Locka, Miami-Dade County Department of Transportation and Public Works (MDCDTPW) Traffic Division, Florida Department of Transportation (FDOT), or other governing agency. Traffic shall be maintained according to corresponding typical traffic control details as outlined in the MDCDTPW Manual. No street shall be completely blocked, nor blocked more than one-half at any time, keeping the other one-half open for traffic, without specific approval. Hard closures require approval from the City of Opa-Locka Transportation Department

B. An off-duty City of Opa-Locka police officer is required. Off-Duty Office phone number is (305) 681-1033.

C. The Contractor shall provide all barricades with warning lights, necessary arrow boards and signs, to warn motorists of the work throughout the project. Adequate approved devices shall be erected and maintained by the Contractor to detour traffic.

D. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times.

E. The Contractor shall provide necessary access to all adjacent property during construction.

F. The Contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the MDCDTPW Manual. In addition, the Contractor shall be responsible for the resetting of all traffic control and information signing removed during the construction period.

G. Where excavations are to be made in the vicinity of signalized intersections, the Contractor is alerted that vehicle loop detectors may have been embedded in the pavement. Every effort has been made to show the approximate locations on the plans; however, the Contractor shall verify these locations by inspecting the site of the work and by contacting the Traffic Division. Any loop detector which is damaged by the Contractor, whether shown on the plans or not, shall be repaired or replaced by the Contractor, at his expense, and to the satisfaction of the Traffic Division.

H. **The Contractor shall notify the Traffic Division twenty-four (24) hours in advance of the construction date, and forty-eight (48) hours in advance of construction within any signalized intersection.**

I. Temporary pavement will be required over all cuts in pavement areas, and also where traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed, and the swale or median areas restored to their previous condition.

J. Pavement markings damaged during construction shall be remarked, as required by the Traffic Division.

PART 2 – PRODUCTS

2.0.1. MAINTENANCE OF TRAFFIC PLANS

A. For construction within the City public right-of-way, the Contractor shall submit two sets of maintenance of traffic (MOT) plans for review to the City of Opa-Locka Public Works Department and the agency having jurisdiction.

B. MOT plans should be designed and developed by a certified MOT Specialist when normal traffic flow will be impacted causing unexpected or confusing situations in unclear travel path for motorist/pedestrians when entering non advanced warning work zones. MOT work zone traffic controls separate and protect workers, pedestrians and motorists delineating areas closed to traffic.

C. MOT plans must be designed in accordance with the requirements of the agency having jurisdiction.

D. MOT plans must be site-specific.

E. MOT plans will be reviewed and approved by the agency having jurisdiction.

F. MOT plans shall be in color. **PART 3 – EXECUTION**

NOT USED

END OF SECTION

DIVISION 2 – SITE WORK

02210 SITE GRADING

PART – 1 GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor shall perform grading work within the limits, elevations and grades indicated on the plans and as specified herein.

1.0.2. RELATED WORK

A. Section 01031 “Grades, Lines and Levels”.

B. Section 02314 “Excavation, Backfill and Fill for Structural Facility and Utility Systems”.

C. Section 02510 “Asphaltic Concrete Pavement”.

1.0.3. QUALITY CONTROL

A. The site shall be graded to the required elevations. Spot elevations are shown on the plans and the finished surfaces shall be uniformly sloped between these locations.

B. Suitable excavated material shall be used in the formation of embankments. The Contractor shall provide all additional fill material required to complete the embankments.

1.0.4. EXISTING CONDITIONS

A. Known underground, surface, and aerial utility lines and buried objects are based on best available data and indicated on the plans. Contractor shall verify all locations.

1.0.5. PROTECTION

A. Protect trees, shrubs, and lawns and other features remaining as part of final landscaping.

B. Protect bench marks, existing structures, fences, roads, sidewalks, paving, and curbs against damage from equipment and vehicular traffic.

C. Protect aerial, surface, or underground utility lines or appurtenance which are to remain.

PART 2 – PRODUCTS

2.0.1. FILL

A. Unless otherwise noted, suitable fill material shall be non-cohesive, non-plastic, granular mixture of local sand and lime rock, shall be free from vegetation, organic material or muck and shall contain not more than 8 percent material by weight which passes the No. 200 sieve. Broken concrete shall not be used in the fill. Fill material containing lime rock shall have sufficient sand to fill the voids in the lime rock, and no individual rocks or pieces of hard material that will not pass a 6-inch diameter ring shall be used in the fill; except that the upper 4-inches of all backfill or fills shall not contain any rock or hard material that will not pass a 3-inch diameter ring. All fill material shall be provided by the Contractor from any excess suitable on-site material or from off site sources, all subject to review and acceptance by the Engineer prior to use. The Contractor shall be responsible for determining the volume of material required for the site.

PART 3 – EXECUTION 3.0.1.

PREPARATION

A. Establish and identify required lines, levels, contours, and datums.

B. Maintain benchmarks, monuments, and other reference points. Re-establish if disturbed or destroyed at no cost to the City.

C. Before start of grading, establish the location and extent of utilities in the work areas. Notify utilities to remove and relocate lines which are in the way of construction.

D. Maintain, protect, reroute, or extend as required existing utilities to remain which pass through the work area.

3.0.2. REMOVAL OF TOPSOIL

A. Topsoil of horticultural value shall be stripped from areas of construction under this contract and stockpiled in area designated by Engineer. Said material shall be stockpiled separately from fill material.

B. Do not permit topsoil to be mixed with subsoil.

C. Do not strip topsoil when wet.

D. Do not drive heavy equipment over stockpiled topsoil.

3.0.3. ROUGH GRADING

A. Rough grade site to required levels, profiles, contours, and elevations ready for finish grading and surface treatment. Maintain the following:

1. Sodded areas: 4 ½-inches below finished grade elevation

2. Seeded areas: 6-inches below finished grade

3. Paved areas: 21½-inches below finished grade elevations

4. Shrub beds: 24-inches below finished grade elevations

5. Flower beds: 18-inches below finished grade elevations

6. Concrete sidewalks: 6-inches below finished grade elevations

B. Prior to placing fill material over undisturbed subsoil, scarify surface to depth of 6inches.

3.0.4. GRADING AND COMPACTION

A. Fill material shall be placed in lifts not to exceed 8-inches and compacted to a density of not less than 95 percent of maximum density at optimum moisture as determined by ASTM D 1557. Fill material shall be within plus or minus 2 percentage points of optimum moisture content. The minimum density acceptable at any location within the pavement subgrade shall be as specified in Section 02745 “Asphaltic Concrete Pavement”.

3.0.5. FINE GRADING

A. After structures, bases and pavements are completed and the yard piping trenches backfilled, the disturbed areas of the site shall be fine graded. All construction debris, regardless of size, shall be removed. The completed surface shall be shaped and sloped to drain away from the structures. The completed surface shall be within 0.1 foot of the elevations shown on the plans, unless otherwise accepted by the Engineer. Minor adjustments to line and grade may be required as the work progresses in order to satisfy field conditions.

3.0.6. SURPLUS MATERIAL

A. Remove surplus materials from site.

B. Dispose of surplus material at no cost to the City.

END OF SECTION

02220 EXCAVATION – GENERAL

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The work specified in this section consists of the removal of protruding objects as required to prepare the area of the proposed construction, and the removal and disposal of all product and debris which are not required to be salvaged or nor required to complete the construction.

1.0.2. RELATED WORK

A. Section 02230 “Clearing and Grubbing”.

B. Section 02314 “Excavation, Backfill and Fill for Structural Facility and Utility Systems”.

PART 2 – PRODUCTS

NOT USED

PART 3 - EXECUTION

3.0.1. REGULAR EXCAVATION

A. Regular Excavation shall include roadway excavation and borrow excavation, as defined for each.

B. Roadway Excavation shall consist of the excavation and the utilization or satisfactory disposal, of all materials necessary for the construction of the roadway, side ditches, etc., within the limits of the roadway right of way as show in the plans.

3.0.2. BORROW EXCAVATION

A. Borrow Excavation shall consist of the excavation and satisfactory utilization of material from authorized borrow pits. It shall include only material that is suitable for the construction of roadway embankments or of other work of constructing embankment covered by the contract and unsuitable material in borrow areas furnished by the City, which must be excavated as determined by the Engineer, in order to obtain the suitable material.

3.0.3. LATERAL DITCH EXCAVATION

A. Lateral ditches shall include inlet and outlet ditches to structures and roadway, changes in channels of streams, and ditches parallel to the roadway right of way, as shown in the plans. Unless otherwise shown in the plans all excavation in that portion of lateral ditches beyond the limits of the roadway right of way, including the sections where dressing is required as provided in 120-11.1, shall be classified as Lateral Ditch Excavation.

3.0.4. SUBSOIL EXCAVATION

A. Where muck, rock, clay or other material within the limits of the roadway is unsuitable in its original position, the Contractor shall excavate such material to the cross sections shown in the plans or indicated by the Engineer, and shall backfill with suitable material, which shall be shaped to conform to the required cross sections. Where the removal of plastic soils below the finished earthwork grade is required, a construction tolerance from the lines shown in the plans as the removal limits, of plus or minus 0.2 foot in depth and plus or minus six inches (each side) in width will be allowed.

3.0.5. TRENCH EXCAVATION

A. General

1. Design, Provide, and maintain shoring, sheeting and bracing as necessary to support the side of excavations and to prevent detrimental settlement and lateral movement of existing facilities, adjacent property, and completed work.

B. Trench Excavation Plan: Prepare Trench Excavation Plan addressing the following topics:

1. Details or shoring, sloping, or other provisions for worker protection from hazards of caving ground.

2. Design assumptions and calculations.

3. Methods and sequencing of installing excavation support.

4. Proposed locations of stockpiled excavated material.

5. Minimum lateral distance from the crest of slopes for vehicles and stockpiled excavated materials.

6. Anticipated difficulties and proposed resolutions.

C. Removal of Excavation Support

1. Remove excavation support in a manner that will maintain support as excavation is backfilled or leave voids of backfill.

2. Do not begin to remove excavation support until support can be removed without damage to existing facilities, completed work, or adjacent property.

D. Trenches

1. For trench exceeding 5 feet in depth, provide adequate safety system meeting requirements of applicable state and local construction safety order, and federal requirements.

3.0.6. DEWATERING SYSTEMS

A. Any water which accumulates in the excavations for structures shall be removed promptly by means satisfactory to the Engineer of Record in such a manner as to not create a nuisance to adjacent property or public thoroughfare. Pumps and engines for dewatering systems shall be operated with mufflers and at a minimum noise level suitable to a residential area. The Contractor shall be responsible for any nuisance created due to the disposal of the water from his drainage system.
B. Where applicable, the Contractor shall be required to obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-way or into any existing drainage structure or facility.

3.0.7. STOCKPILING EXCAVATED MATERIAL

C. Stockpile excavated material that is suitable for use as fill or backfill until material is needed.

D. Post signs indicating proposed use of material stockpiled. Post signs that are readable from all directions of approach to each stockpile. Signs should be clearly worded and readable by equipment operators from their normal seated position.

E. Confine stockpiles to within easements, right-of-way, and approved work areas. Do not obstruct road or streets.

F. Do not stockpile excavated material adjacent to trenches and other excavations unless excavation side-slopes and excavation support systems are designed, constructed, and maintained for stockpile loads.

G. Do not stockpile excavated materials near or over existing facilities, adjacent property, or completed work, if weight of stockpiled material could induce excessive settlement.

H. Disposal of Spoil

3.0.8. DISPOSAL OF SURPLUS AND UNSUITABLE MATERIAL

A. Ownership of Excavated Materials

2. Owner of all suitable excavated material shall remain in the City until the final job requirements for fill or backfill materials have been fulfilled. Unless otherwise provided by the plans or special provisions, any surplus materials then remaining and not needed for job requirements shall become the property of the Contractor and are to be disposed of by him/her, outside the right of way, to the satisfaction of the Engineer.

3. In urban or other areas where temporary storage of apparent excess suitable materials within the right of way may be impracticable, the Contractor may stockpile the materials outside the right of way in areas provided by him/her. Until stock materials are needed in the job or are declared surplus. With the written approval of the Engineer, the Contractor may dispose of such apparent excess material with the

stipulation that he shall replace any portion of the disposed material required to fulfill the actual job requirements, with equally suitable material, at his own expenses.

4. No extra compensation will be allowed for any re-handling involved under the provisions of this Sub-article.

B. General Requirements for Disposal: Excavated muck or other materials unsuitable for the roadway construction shall be disposed of as shown in the plans or, if the plans do not indicate the disposal, the materials shall become the property of the Contractor and shall be disposed of by him/her outside the right of way.

C. Disposal of Muck on Side Slopes: As an exception to the provisions of 120-5.2 when approved by the Engineer, in rural undeveloped areas muck (A-8 material) may be placed on the slopes, or may be stored alongside the roadway, provided there shall be a clear distance of at least six feet between the roadway grading limits and the muck, and the muck shall be so dressed as to present a reasonably neat appearance. In addition, disposal of this material by placing on the slopes may also be permitted in developed areas where, in the opinion of the Engineer, this will result in an esthetically pleasing appearance and will have no detrimental effect on the adjacent developments. Where muck or other unsuitable material is permitted to be disposed of inside the right of way limits, such material shall not be placed such as to impede the inflow or outfall of any channel or of side ditches. The Engineer shall determine the limits adjacent to channels within which such materials shall no be placed.

D. Disposal of Paving Materials: Unless otherwise indicated in the plans, paving materials excavated in the removal of existing pavements, such as paving brick, asphalt block, concrete slab, lime-rock, sidewalk, curb and gutter, etc., shall become the property of the Contractor and shall be disposed of by him/her outside the right of way. If the materials are to remain the property of the City, they shall be placed in neat piles as directed.

E. Disposal Areas: Where the plans or specifications require the Contractor to dispose of excavated materials outside the right of way, and the disposal area is not indicated in the contract documents, the Contractor shall furnish the disposal area without additional compensation. Areas provided by the Contractor for disposal of removed paving materials shall be out of sight of the project and at least 300 feet from the nearest roadway right of way line of any State-maintained road. The 300-foot limitation will not apply, however, if the materials are buried.

1.0.10 USE OF PUBLIC STREETS

A. Ownership of use of public streets and alleys shall be such as to provide a minimum of inconvenience to the public and to other traffic. Any earth or other excavated material spilled from trucks shall immediately be removed by the Contractor and the streets cleaned to the satisfaction of the governing authority.

B. The City has not made any attempt to define the equipment to be used in transporting the excavated material since this may vary, however, the Contractor shall abide by the following general requirements:

1. Transport vehicles must be of the type(s) approved for this application by the political jurisdictions involved. General requirements are that the vehicles have watertight bodies that they be properly equipped and fitted with seals and covers to prohibit material spillage or draining, and that they be cleaned as often as is necessary to prevent deposit of material on roadways. Vehicles must be loaded within all legal weight limits and operated safely within all traffic and speed regulations.

2. Access to businesses, schools and homes along the route of the work must be provided by the Contractor at all times.

3. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained with temporary asphalt that will allow normal vehicular traffic to pass over.

END OF SECTION

02230 CLEARING AND GRUBBING

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. Unless otherwise shown in the plans, Standard Clearing and Grubbing shall be done within the following areas:

1. All areas where excavation is to be done, including borrow pits, lateral ditches, right of way ditches, etc.

2. All areas where roadway embankments will be constructed.

3. All areas where structures will be constructed, including pipe culverts and other pipelines.

4. Any other areas specifically called for on the plans to be cleared and grubbed.

1.0.2. DEFINITIONS

A. Clearing shall consist of the cutting, removal and satisfactory disposal of all trees, stumps, brush, shrubs, rubbish and any other objectional material within the designated areas.

B. Grubbing shall consist of the removal and disposal of all stumps larger than 1-1/2 inches in diameter and other objectional material to a depth of at least 12 inches below the ground surface.

1.0.3. QUALITY ASSURANCE

A. In the course of the work, it may become to remove trees if they interfere with the work. Dade County and various municipalities have ordinances regulating the removal, relocation and pruning of trees in the public right-of-way, these ordinances shall be strictly adhered to. The Contractor shall obtain a permit from Dade County and/or other regulatory agencies having jurisdiction over the work area before removing, relocating and/or pruning any tree. The Contractor shall comply with all requirements and conditions of the permit.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.0.1. CLEARING AND GRUBBING

A. The Contractor shall remove and replace, where required all existing shrubbery, trees, grass, sprinklers, fences, signs, mailboxes, structures, roadways, sidewalks, curbs and similar items or structures in the way of all excavation necessary for the construction of the project.

B. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges. Where such cutting is for the purpose of pipeline installation, saw cutting shall be either parallel or at right angles with the centerline of the pipe.

C. To protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction, prior to proceeding with any work in the vicinity.

3.0.2. DEPTHS OF REMOVAL OF ROOTS, STUMPS AND OTHER DEBRIS

A. In all areas where excavation is to be done and where the excavated material is to be used in the construction of roadway embankment or roadway base or pavement; also in all areas where roadway embankment will be constructed; roots and other debris shall be removed to a depth of at least one foot below the ground surface. The surface shall then be plowed to a depth of at least six inches and all roots thereby exposed shall be removed to a depth of at least one foot. All stumps within the roadway right of way shall be completely removed and disposed of by the Contractor.

B. Where excavation is done within the roadway area and where excavation for structures is done, all roots, etc., protruding trough or appearing on the surface of the completed excavation shall be removed to a depth of at least one foot below the excavation surface.

C. In borrow pits, material pits and lateral ditches, all stumps, roots, etc., protruding through or appearing on the surface of the completed exaction shall be removed or cut off below the finished excavation surface.

D. In borrow and material pits no clearing or grubbing shall be done to within three feet inside the right of way line.

E. Within all other areas where Standard Clearing and Grubbing is to be done, roots and other debris, projecting through or appearing on the surface of the original ground, shall be removed to a depth of one foot below the surface, but no plowing and harrowing will be required in these areas.

3.0.3. TREES TO REMAIN

A. As an exception to the above provisions, where so directed by the Engineer, desirable trees within the roadway and project site area shall be trimmed, protected and left standing. Branches of trees extending over the area occupied by the roadway shall be trimmed as directed, to give a clear height of 16 feet above the roadway.

3.0.4. BOULDERS

A. Any boulders encountered in the roadway excavation, or found on the surface of the ground, shall be removed and placed in neat piles inside the right of way and adjacent to the right of way line.

3.0.5. SELECTIVE CLEARING AND RUBBING

A. Selective Clearing and Grubbing shall consist of removing and disposing of all vegetation, obstructions, etc., as provided above except that, where the Contractor so elects roots, etc., may be cut off flush with the ground surface. Stumps shall be completely removed and disposed of by the Contractor. Undergrowth shall be entirely removed except in specific areas designated by the Engineer to remain for aesthetic

purposes. Desirable trees shall be trimmed, protected and left standing, with the exception of such trees as the Engineer may designate to be removed in order to facilitate right of way maintenance. Undesirable or damage trees (as so designated by the Engineer), shall be removed. Selective Clearing and Grubbing shall be done only in areas so designated in the plans.

3.0.6. PROTECTION OF ADJACENT AREAS

A. The Contractor shall protect areas shown on the drawings or designated by the Engineer of Record to remain protected from damage by construction operations by erecting suitable barriers of other acceptable means.

B. Property obstructions which are to remain in place, such as buildings, sewers, drains, water or gas pipes, conduits, poles, walls, posts, bridges, etc., are to be carefully protected from damage and are not to be displaced.

3.0.7. DISPOSAL

A. All roots, vegetation and other refuse removed from the site during clearing and/or grubbing operations shall be legally disposed of by the Contractor. Where required, the Contractor shall obtain a permit from Miami-Dade County and/or other regulatory agencies having jurisdiction over the work area before burning any material on the site.

END OF SECTION

02314 EXCAVATION, BACKFILL AND FILL FOR STRUCTURAL FACILITY AND UTILITY SYSTEMS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The work included under this Section consists of furnishing material and equipment, and performing all labor necessary for excavating, backfilling, filling and compaction of areas to be occupied by facilities or utility systems to be constructed.

B. Plan For Excavation: Prior to commencing the excavation, the Contractor shall submit a plan of his proposed operations to the Engineer of Record for approval. The Contractor shall consider, and his plan for excavation shall reflect, existing utilities that are to remain, the equipment and methods to be employed in the excavation.

1.0.2. QUALITY ASSURANCE

A. All excavations shall conform with South Florida Building Codes, the State of Florida Trench Safety Act, OSHA requirements and the provisions herein. Excavations shall be executed in accordance with all applicable requirements of Section 01016, including notification of Sunshine State One-Call Center (1-800-432-4770) 48 hours prior to any excavation.

B. Work shall be performed in accordance with Contract Documents, Drawings, and/or City of Opa-Locka Public Works Manual Specifications and Standard Details, in a neat and accurate manner. It is the intent of the City to obtain a complete and working installation according to these Specifications, and any items of labor, equipment, or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the project plans or stated herein.

C. Asphalt Acceptance Standards: The following minimum defects identified by the City or designee must be covered by warranty (but not limited to):

1. Sunken pavement patches greater than or equal to one-quarter (¼) inch (measured by a twelve (12) foot straight edge).

2. Surface raveling or oxidation due to deficiencies with the asphalt material.

3. Poor workmanship.

4. Inadequate compaction per Standards and Specifications.

PART 2 – PRODUCTS 2.0.1.

BACKFILL MATERIAL

A. Except where a 1:10 cement/sand or flowable fill concrete mix is required, granular soil backfill materials shall be utilized. Suitable backfill material shall be clean, shall not be expansive nor have high organic content, shall be free of clay, marl, unstable materials, debris, lumps and clods, and shall meet the following requirements.

1. Maximum Liquid Limit shall not exceed 12 as determined by ASTM D4318.

2. Maximum Plasticity Index shall not exceed 35 as determined by ASTM D4318.

3. Not more than 10 percent of weight shall be finer than 74-micron (No. 200) U.S. Standard Sieve.

B. Backfill material containing limerock shall have sufficient sand to fill the voids in the limerock. No stones or rocks larger than 6-inches in diameter will be permitted in any backfill.

C. Debris, broken paving, or broken concrete shall not be used.

D. Material for backfill may be material resulting from excavation, only if it meets the above mentioned requirements, or if suitable in the opinion of the City or designee. If sufficient suitable backfill material, including select backfill material, is not available from the site, additional material shall be furnished.

2.0.2. SELECT BACKFILL

A. Select backfill material specified herein shall meet all the general requirements for backfill material set forth in 2.01, and in addition, shall be free of any rocks or stones larger than 2 inches in diameter. Select backfill material may be material resulting from trench excavation, if suitable in the opinion of the City or designee, carefully selected to comply with these requirements.

1. Trenches remaining open to facilitate the repair of existing underground utilities damaged by the Contractor during excavation shall not be deemed a portion of the allowable 600 feet of open trench, unless otherwise decided by the Engineer, at his discretion.

2. **Backfilling and compaction shall be kept up with the rate of pipe laying. Backfill consisting of the specified material shall be placed and properly compacted, to the degree specified hereinafter. Unless otherwise ordered or approved by the Engineer, in writing, no temporary fill, refill, or uncompacted fill shall be installed. Under no circumstances shall backfill material other than that specified or an approved equal be installed. Backfill shall be placed and compacted immediately after installation of piping.**

3. Where existing paving is damaged or removed, temporary paving, as specified hereinafter shall be placed the same day as the ditch backfill and compaction and it shall be replaced with permanent paving within thirty (30) days, to the limits shown in the City's Standard Details or directed by the Engineer.

4. Backfilling and compaction of trenches will not be allowed until the work has been inspected by the Engineer, and the Engineer indicates that backfilling and compaction may proceed. Any work covered up or concealed without the

knowledge or consent of the Engineer may be required to be uncovered or exposed at no cost to the City.

5. The Contractor shall backfill and compact all trenches and other excavations made in the process of installing the pipe. The cost of all backfilling and compaction shall be included in the price bid under the various Items. The Contractor shall maintain the surface of the backfill free from major irregularities and potholes. Backfill to a point at least one (1) foot above the pipe shall be select backfill material not exceeding two (2) inches in diameter. Above this point, backfill shall be of material not exceeding six (6) inches in diameter.

6. Backfilling and compacting of material under and around the pipe and to one (1) foot above the crown shall be in layers not exceeding six (6) inches in thickness. Each layer shall be thoroughly compacted to at least 98 percent of maximum density as determined by AASHTO Standard No T-180-74, "Moisture-Density Relations of Soils using a 10-lb. (4.54 Kg.) Rammer and an 18 in. (457 mm) Drop." The material in the ditch may be compacted by either hand tamper or a mechanized power tamper, provided the results obtained meet the continued approval of the Engineer.

7. Backfilling and compacting of material lying above a point one (1) foot above the crown of the pipe and below the pavement base or the surface of the ground if out of pavement shall be accomplished in layers not exceeding six (6) inches in thickness. Each layer shall be thoroughly compacted with a powered hand tamper or a mechanized power tamper to at least 98 percent of maximum density as determined by AASHTO Specification T-180-74 or such greater density as may be required by the governing authority over the area in which the work is performed.

8. A testing laboratory, designated by the City, will make periodic field tests to determine the density being obtained in each lift, or layer, of the backfill. The City will pay the cost for each test that indicates that the density obtained in the backfill meets or exceeds the specified percentage. Contractor shall pay the cost for each test that indicates that the density obtained in the backfill is insufficient and does not meet the specified percentage. When compacted backfill fails to meet the specified percentage of maximum density as shown by test results, it shall be reworked and recompacted in a manner approved by the Engineer, and then retested. The reworking, recompacting and retesting of the backfill shall be repeated as many times as may be necessary to obtain compacted backfill with density meeting or exceeding the specified percentage as indicated by test results. The Contractor shall exercise proper care to ensure that no pipe will be broken or displaced through the use of the type of mechanical compacting equipment he selects. Water shall be added as required to obtain optimum moisture to facilitate compaction, but ponding or inundation of backfill will not be permitted. These ponding limitations shall not prohibit backfill in a wet trench up to the level of the

natural water table if the "Alternate Method of Construction" is utilized. See Section 02220 “Excavation – General”.

9. Backfill and compaction shall be kept up with the rate of pipe laying. The backfill up to the spring line of the pipe shall be placed and compacted as soon as practical after the laying of the pipe.

10. On parts of the line where ground water level may be high enough to float the pipe, the placing of the backfill and the rate of pumping the trench shall be so controlled as to prevent the pipe from floating or moving from the line and grade shown on the Plans.

11. In the event that sufficient suitable material is not available at any point to properly backfill the trench, the Contractor shall transport suitable material from points of the line where such material is available or shall otherwise furnish suitable material at no additional cost to the City.

12. Suitable material in excess of all backfill requirements shall be removed from the work and disposed of by the Contractor. The cost for removal shall be included in the overall Project cost bid.

13. Where cuts have been made through unpaved, stabilized rock roadways, driveways and parkways, surface restoration shall consist of 3 inches of compacted limerock overlaid by 3 inches of gravel or graded and washed rock with a maximum diameter of 1/2-inch except as otherwise directed by the Engineer. The rock shall be installed over the entire width of the disturbed area and shall closely match the existing rock at each location. Several grades of rock may be required to attain this end, but it is not anticipated that more than one grade will have to be used at any one location. The cost for replacement of gravel or rock stabilized driveways and roadways shall be included in the overall Project cost bid unless a specific Bid Item is established in the Quotation.

14. Backfill material shall consist of the suitable excavated material being stored for this purpose. Backfill material placed within one (1) foot of piping and appurtenances shall not contain any stones or rocks larger than two (2) inches in diameter, and no stones or rocks larger than 6 inches in diameter will be permitted in any backfill. Backfill material containing mangrove muck or other unsuitable materials shall not be used.

15. During the backfilling operation, care shall be taken to preserve the alignment and gradient of the installed pipe.

2.0.3. SUITABLE BACKFILL

A. Suitable backfill material shall be clean and free from all organic material, clay, marl or unstable materials, debris, lumps, broken paving, or other deleterious material. No rocks or stones larger than 3½ inches in diameter shall be allowed in any suitable backfill. Material for backfill may be material resulting from excavation, if suitable in the opinion of the City or designee.

2.0.4. STRUCTURAL FILL

A. Structural fill shall consist of an inorganic, non-plastic, granular soil containing less than 10% material passing the No. 200 mesh sieve (relatively clean sand or crushed limerock with a 2 inches max. particle size) with a Unified Soil Classification of GP, GW, SP, SPGM, SW-SM or SP-SM.

2.0.5. UNSUITABLE FILL AND BACKFILL MATERIAL

A. Unsuitable fill and unsuitable backfill material shall be all material not meeting the definition of Structural Fill, Suitable Backfill, or Select Fill and cannot be amended or blended in the field to meet the standard of one of these fills. Unsuitable Fill material may contain deleterious material including but are not limited to: cherty or other extremely hard pieces, lumps, balls or pockets of sand or clay size material, organic matter, muck, loose sand, loose free shells, corals or skeletal remain of other marine invertebrates retained on the No. 4 sieve, or water sensitive clay minerals.

2.0.6. BEDDING MATERIAL

A. Pipe bedding material shall be accordance with the Culvert Pipe Manufacturer's Standard Details, firstly, and FDOT if not specified.

B. Bedding may be select backfill material, as specified above, if approved by the City or designee.

C. No. 57 stone may be used for bedding of piping (except for copper pipe) and/or manholes as shown on the Standard Details.

D. Sand for bedding shall be dry screened. Sand shall be graded sand with 100% passing a ⅜ inch sieve and not more than 5% passing a No. 200 sieve.

E. Limerock screenings, sand or other fine material shall not be used for bedding.

F. All pipe bedding material shall be new, unless otherwise approved by the City or designee. Existing pipe bedding material may not be used.

2.0.7. NO 57. STONE

A. No 57 stone shall be crushed stone (or drain field limerock). Crushed stone shall consist of hard, durable, sub-angular particles of proper size and gradation, and shall be free from organic material, wood, trash, sand, loam, clay, excess fines, and other deleterious materials. The stone shall conform to the requirements of ASTM C 33, Size No. 57 (3/4- inch rock) and be graded within the following limits:

Sieve size	Percent Finer by Weight
1-½ inch	100
1 inch	95 to 100
½ inch	25 to 60
No. 4	0 to 10
No. 8	0 to 5

2.0.8. BALLAST ROCK

A. Ballast rock shall be composed of hard, durable, sound pieces having a specific gravity of not less than 2.65. It shall be crushed rock conforming to the following gradation:

Sieve size	Percent Finer by Weight
1-½ inch	100
¾ inch	30 to 75
½ inch	15 to 55
¼ inch	0 to 5
No. 8	0 to 5

2.0.9. SEPARATOR GEOTEXTILE

A. If required by Geotechnical Report, roadways shall be demucked or stabilized with a separator geotextile in accordance with the Geotechnical Report.

B. Laboratory analysis shall be completed, and all material to be used in the construction of the road shall be approved by the City or designee prior to placement.

C. Separator geotextile shall be made from woven fabric, meeting the physical requirements of FDOT Specifications Section 985 and placed as per manufacturer's Specifications or as directed by the City or designee. At a minimum, separator geotextile shall have 1 foot overlap, and upslope segments must overlap on top of down slope segments.

D. Follow the manufacturer's recommendations regarding protection from direct sunlight. At the time of installation, the City or designee will reject the material if it has defects, tears, punctures, flaws, deterioration, or other damage. However, if approved by the City or designee, the Contractor may repair torn or punctured sections by placing a patch over the damaged area following manufacturer's recommendation. The Contractor shall replace or repair any rejected geosynthetic at no additional expense to the City.

E. Repair existing or newly installed separator geotextile by a patch consisting of the same material as the reinforcement separator geotextile over the damaged area. Overlap the undamaged reinforcement separator geosynthetic with the patch a minimum of 5 feet in all directions. Replacement of existing separator geotextile material shall be of similar or better quality and shall meet the requirements as provided in FDOT Specifications, Section 985.

2.0.10. STEEL – REINFORCING

A. Bar reinforcement for concrete structures shall conform to the requirements of ASTM A615, "Deformed and Plain Billet-Steel Bars for Concrete Reinforcement," Grade 60, Deformed, except that Steel manufactured by the Bessemer Process will not be accepted. Wire mesh reinforcing for concrete structures shall be welded wire fabric meeting the requirements of ASTM A185 "Steel Welded Wire Fabric, Plain, for Concrete Reinforcement."

B. The Contractor shall furnish the Engineer with the manufacturer's test certificates showing the Steel to meet the above requirements, in addition to which the Engineer may take representative samples from the material on the job and have them tested by an independent testing laboratory.

C. Completely detailed shop drawings and bending schedules shall be submitted by the Contractor for the approval of the Engineer. Such approval shall be obtained before the bars are cut and bent.

2.0.11. STEEL – SHEET PILING

A. Steel sheet piling shall conform to the requirements of ASTM A572 "High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality," (AASHTO No. M223) or ASTM A328 "Steel Sheet Piling."

B. The Contractor will be responsible for design and selection. Structural plans for the sheet steel piling installation and the calculations for the required Section Modulus and the Sheet Piling Designation shall be prepared by a registered professional engineer licensed to practice in the State of Florida. Sealed plans shall be submitted to the Engineer for approval prior to installation of the piling system.

C. Structural steel shall meet the requirements of ASTM A36 "Structural Steel."

D. Whenever shoring is required, locate the system to clear permanent construction and to permit forming and finishing of concrete surfaces. Provide shoring system adequately anchored and braced to resist earth and hydrostatic pressures. Shoring system adequately anchored and braced to resist earth on which the support or stability of existing structures is dependent must be left in place at completion of work. Maintain bracing until structural elements are supported by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

PART 3 – EXECUTION 3.0.1.

PREPARATION

A. The Contractor shall remove and replace, where required, all existing shrubbery, trees, grass, sprinklers, fences, signs, mail boxes, guard rails, structures, roadways, sidewalks, curbs and similar items or structures in the way of the culvert and shall make all excavation necessary for the construction of the culvert, to the lines and grades shown on the Plans. Weeded areas shall be restored as specified in Section 02900 “Landscaping”, Care of Trees, Shrubs and Grass. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall in general be either parallel or at right angles with the centerline of the culvert. Unless specific bid items are provided in the Quotation form, the cost of removing and replacing any plantings or existing structures shall be included in the price bid. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the Engineer.

B. Clearing: The construction site shall be cleared of all obstructions and vegetation, including large roots and undergrowth, within 5 feet of the lines of excavation, in accordance with Section 02230 “Clearing and Grubbing”. All debris created by this clearing operation shall be hauled from the site and disposed of by the Contractor.

1. All cleared materials shall be promptly removed from the work area and disposed of in an area provided by the Contractor, at no additional cost to the City. Accumulation of debris or stockpiling along the route of the work will not be allowed.

C. Removals: Complete all removals within the lines of excavation prior to beginning excavation. Where required, all existing shrubbery, trees, grass, sprinklers, fences signs, mailboxes, structures, sidewalks, curbs, utility poles, or structures subject to

damage resulting from the excavation should be transplanted, relocated, braced, shored, or otherwise protected and preserved.

3.0.2. EXCAVATION

A. Excavation shall be conducted in accordance with FDOT Specifications, Section 120.

B. Where rock, clay, or other material within the limits of the roadway is unsuitable in its original position, the Contractor shall excavate such material to the cross sections shown in the Plans or indicated by the City or designee, and shall backfill with suitable material, which shall be shaped to conform to the required cross sections. Where the removal of plastic soils below the finished earthwork grade is required, a construction tolerance from the lines shown in the Plans as the removal limits as defined by the Geotechnical Engineer of plus or minus 0.2 feet in depth and plus or minus six (6) inches each side in width will be allowed.

C. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depths shown on the approved plans, but in all cases as required for construction, and as specified herein. All excavations shall be made by open cut. All existing utilities such as pipes, poles, and structures shall be carefully located, supported, and protected from injury; in case of damage, they shall be restored at the Contractor's expense.

D. When the walls of the excavations are to be kept vertical and in order to protect the safety of workmen, the general public, this or other work or structures, or excavation walls, or pipe installation including materials encountered in the excavation which have a tendency to slough or flow into the excavation, undermine the banks, weaken the overlying strata, or are otherwise rendered unstable by the excavation operation shall be retained by steel sheeting, stabilization, grouting or approved methods. Said methods shall comply with the Trench Safety Act (TSA). Sheeting and shoring or other approved method shall be designed by a Professional Engineer licensed to practice in the State of Florida.

E. For structures, the Contractor shall maintain the bottom of the excavation firm and dry and maintain an elevation of the water one (1) foot below the concrete to be placed, by use of pumps, tremie or other acceptable method.

F. Pipe trench excavation shall be in accordance with the appropriate Standard Detail in the Miami-Dade County Public Works Manual or FDOT.

G. The Contractor shall excavate pipe trenches to a minimum of 6 inches below the outside bottom of the proposed pipe barrel to provide for the installation of the bedding material.

H. Not more than 100 feet of trench shall be opened ahead of pipe laying operations at one time unless a greater length of open trench is approved by the Engineer.

I. If, in the opinion of the Engineer, the soil at that depth is unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the excavation shall be continued two (2) feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required. The cost of this extra excavation, and backfilling with select backfill material, shall be included in the price for pipe laying and no additional payment will be made for this work.

J. If the soil is still unsuitable after the additional excavation as prescribed above, and the Engineer authorizes "Overcut," the trench bottom shall be excavated further in one (1) foot increments and paid for as "Trench Overcut." See below 3.0.6. "Trench Overcut.

K. Trench widths, when measured at a point 12 inches above the top of the pipe, shall provide a 12 inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench width shall provide at least 6 inch clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used.

For excavations five (5) feet deep or less, sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures. When an excavation is in excess of five (5) feet deep, the Contractor shall comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act." Method(s) of compliance used shall protect the workmen and the general public, prevent damage to this or adjacent work, structures, utilities, pavements, sidewalks, curbs, gutters and similar improvements both public and private, and provide for proper maintenance of traffic. The trench width may vary to accomplish this and to comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act," but only from a point one (1) foot above the top of the pipe.

L. For trench exceeding 5 feet in depth, provide adequate safety system meeting requirements of applicable Local, State, and Federal requirements.

M. In areas where trench widths are not limited by right-of-way or easement widths, property line restrictions, existing adjacent improvements including pavements, structures, and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material.

N. In areas where trench widths are not limited by site constraints the trench sides may be sloped to a stable angle of repose of the excavated material but only from a point one foot above the crown of the pipe. A substantially and safely constructed

movable shield, "box" or "mule" may be used in place of sheeting when the trench is opened immediately ahead of the shield and closed immediately behind the shield as pipe laying proceeds inside the shield.

O. Ladders or steps shall be provided for and used by workmen to enter and leave trenches.

P. Excavated material shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks. In congested areas, such materials, cannot be stored adjacent to the trench nor used immediately as backfill, shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, it shall be removed immediately to a storage area.

Q. Materials suitable for use as backfill be hauled to and used in areas where not enough suitable material is available from the excavation. Suitable material in excess of backfill requirements shall be used on the site as directed by the City or designee, or removed at the Contractor’s expense. Any pockets of organic matter, concrete or other unsuitable material encountered in excavating shall be removed and replaced with material satisfactory to the City.

R. The excavation of walls for forms will not be permitted.

S. The trench wall shall be kept at a stable angle of repose to maintain trench widths within the limits hereinafter specified or shown on the Plans.

T. The trench, when in rock, shall be excavated to a width within the limits of the top of the pipe and the trench bottom so as to provide a clearance on each side of the pipe barrel, measured to the face of the excavation, of 12 inches. Rock or removal in the excavation shall be considered a part of the excavation and as such no additional payment shall be made therefore. Where excavation is in silt, the width of trench bottom shall be pipe O.D. plus two (2) feet with the trench walls being kept at a stable angle of repose. All pipe trenches shall be excavated to a level at least 12 inches below the outside bottom of the proposed pipe barrel.

U. Where wood sheeting or certain designs of steel sheeting are used, the City may require that the sheeting be cut off at a level two (2) feet above the top of the installed pipe and that portion below that level be left in place. If ordered left in place, sheeting and shoring shall be paid for under the appropriate Quotation Item.

V. If interlocking steel sheeting is used, the City may permit its complete removal in lieu of the cut-off, providing removal can be accomplished without disturbing the bedding, pipe or pipe alignment. Any damage to the pipe bedding, pipe or pipe alignment shall be cause for rejection of the affected portion of the work.

W. A substantially and safely constructed moveable shield or box, as approved by the Engineer, may be used in place of sheeting when the trench is opened immediately behind the shield as pipe laying proceeds inside the shield. All construction in conjunction with using such a shield must be as approved by the Engineer, including excavation, installation of pipe and backfilling and compaction.

X. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depth shown on the Plans, or as directed by the Engineer. All excavations shall be made by open cut. Any existing utilities such as pipes, cables, etc., shall be carefully supported and protected from damage, and in case of damage, they shall be restored at no cost to the City.

Y. Excavation for other piping and appurtenances shall be sufficient to leave at least 12 inches clear between their outer surfaces and the embankment or sheeting that may be used to protect them.

Z. Provide excavation support as necessary to support sides of excavations and prevent detrimental settlement and lateral movement of existing facilities, adjacent property, and completed Work.

AA. Remove excavation support in a manner that will maintain support as excavation is backfilled or leave voids of backfill. Do not begin to remove excavation support until support can be removed without damage to existing facilities, completed Work, or adjacent property.

BB. Materials removed from the trenches shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks and they shall not be placed on private property. In congested areas, such materials as cannot be stored adjacent to the trench or used immediately as backfill shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, in the opinion of the Engineer, it shall be removed immediately by the Contractor to a storage area.

CC. The Contractor shall temporarily store excavated material suitable for backfill in full compliance with the provisions of the permits. All mud, silt, debris and other material unsuitable for backfilling the trench shall be removed and legally disposed of offsite by the Contractor. The Contractor shall make his own arrangements regarding stock piling of excavated suitable material and storage and assembly space to properly and safely carry out the construction. Any agreements entered into by the Contractor and property owners shall hold the City harmless. Storage of excavated material shall not cause environmental problems and shall be performed at no additional cost to the City.

DD. Excavation for structures:

1. Clear, as stated above, all existing items or structures in the way of the proposed pipeline or structures and excavate as necessary to the depths and dimensions shown on the plans, but in all cases as necessary for satisfactory installation.

2. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall, in general, be either parallel or at right angles.

3. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the City.

4. Where interlocking steel sheeting is used, the City may require that the sheeting be cut off at a level two (2) feet above the top of the installed pipe and that portion below the level be left in place.

5. Excavation for manholes and other piping appurtenances shall be sufficient to leave at least two (2) feet clear between their outer surfaces and the embankment or sheeting.

6. If, in the opinion of the Engineer of Record or the City, the soil at that depth is unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the excavation shall be continued two (2) feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required.

7. When the pipe to be installed in a trench requires the pipe installers to work under and around the pipe, the Contractor may request the City that he be allowed to exceed the 12" maximum clearance, specifying the clear distance desired.

8. The ends of existing mains shall be temporarily capped or plugged to keep them clean and the ends of all mains shall be temporarily anchored to keep the joints from blowing apart from internal pressure until the new mains can be reconnected to them.

9. In addition to specific construction methods specified, the general requirements in subsequent subsections, below, shall apply to the work of this project.

3.0.3. TRENCH STABILIZATION

A. No claim for extras or additional payment will be considered for cost incurred in the stabilization of trench bottoms which are rendered soft or unstable as a result of

construction methods, such as improper or inadequate sheeting, or other causes. In no event shall pipe be installed when such conditions exist and the Contractor shall correct such conditions so as to provide proper bedding or foundations for the proposed installation at no additional cost to the City.

3.0.4. SHEETING AND SHORING

A. Contractor shall be solely responsible for the design, installation, and maintenance of shoring, sheeting, and bracing as necessary to support the sides of excavations and to prevent detrimental settlement and lateral movement of existing facilities, adjacent property, and completed Work. Design of shoring or other excavation support shall be provided by a Professional Engineer licensed in the State of Florida. Prior to trench excavation, a Trench Excavation Plan shall be prepared and shall address the following topics.

1. Details of shoring, sloping, or other provisions for worker protection from hazards of caving ground.

2. Design assumptions and calculations.

3. Methods and sequencing of installing excavation support.

4. Proposed locations of stockpiled excavated material.

5. Minimum lateral distance from the crest of slopes for vehicles and stockpiled excavated materials.

6. Anticipated difficulties and proposed resolutions

B. Sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures.

C. For excavations five (5) feet deep or less, sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures. When an excavation is in excess of five (5) feet deep, the Contractor shall comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act." Method(s) of compliance used shall protect the workmen and the general public, prevent damage to this or adjacent work, structures, utilities, pavements, sidewalks, curbs, gutters and similar improvements both public and private, and provide for proper maintenance of traffic. The trench width may vary to accomplish this and to comply with the provisions of Florida Statutes Chapter 553, Part III, "Trench Safety Act," but only from a point one (1) foot above the top of the pipe.

D. Trench widths, when measured at a point 12 inches above the top of the pipe, shall provide a 12-inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench width shall provide at least 6-inches clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used.

E. Where wood sheeting or certain designs of steel sheeting are used, the City may require that the sheeting be cut of at a level two (2) feet above the top of the installed pipe and that portion below that level be left in place. If ordered left in place, sheeting and shoring shall be paid for under the appropriate Quotation Item.

F. If interlocking steel sheeting is used, the City may permit its complete removal in lieu of the cut-off, providing removal can be accomplished without disturbing the bedding, pipe or pipe alignment. Any damage to the pipe bedding, pipe or pipe alignment shall be cause for rejection of the affected portion of the work.

G. In areas where trench widths are not limited by right-of-way and/or easement widths, property line restrictions, existing adjacent improvements, including pavements, structures and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material, but only from a point one (1) foot above the crown of the pipe.

3.0.5. MOVABLE SHIELD (MULE)

A. A substantially and safely constructed moveable shield or box, as approved by the Engineer, may be used in place of sheeting except where it is specifically called out on the Plans or in the Specifications to install sheeting. When using a shield, the trench is opened immediately ahead of the shield as pipe laying proceeds inside the shield. All construction in conjunction with using such a shield must be as approved by the Engineer, including excavation, installation of pipe, and backfilling and compaction. When a moveable shield or box is used, the installed pipe shall be secured to prevent it from moving when the box is moved.

3.0.6. TRENCH OVERCUT

A. Trench overcut provisions herein shall be used only under direct authorization by the Engineer.

B. If, after excavating the trench to a depth of 2 feet 6 inches below the outside bottom elevation of the proposed pipe barrel, and the soil at that depth is still unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, and the Engineer authorizes overcut, the pipe trench shall be excavated further in one (1) foot increments until either a suitable foundation material is found, or the Contractor is directed by the Engineer to stop trench overcut operation

and begin backfilling. In no case will trench overcut be more than 6 feet in depth, i.e., to a point 8 feet 6 inches below the bottom of the pipe.

C. Selected backfill, as defined in 2.0.1. “Materials” shall then be compacted in 6-inch layers up to the bottom of the proposed 6 inches of pipe bedding.

3.0.7. DEWATERING

A. It is a basic requirement of these Specifications that excavation shall be free from water before pipe or structures are installed. The Contractor shall refer to 3.0.12. "Alternate Method of Construction" below.

3.0.8. TRENCH RESTORATION

A. Trench restoration shall be per the applicable of Miami Dade County Standard Details, firstly, and FDOT if not specified.

B. Mill and resurface minimum 1 inch in accordance with the restoration limits in Part 1 or as directed by the City of Opa-Locka Public Works Department. Prior to placing pavement, City Public Works inspection is required. If milled section crosses a pedestrian path or temporary pedestrian path/detour, an asphalt apron must be provided at transitions with all adjacent surfaces within the pedestrian crossing.

C. Where cuts have been made through unpaved, stabilized rock roadways, driveways and parkways, surface restoration shall consist of 3 inches of compacted limerock overlaid by 3 inches of gravel or graded and washed rock with a maximum diameter of ½ inch, except as otherwise directed by the City or designee. The rock shall be installed over the entire width of the disturbed area and shall closely match the existing rock at each location. Several grades of rock may be required to attain this end, but it is not anticipated that more than one grade will have to be used at any one location.

3.0.9. TEMPORARY PAVEMENT

A. Temporary paving will be required along the entire route where the original paved surface is removed. Unless otherwise approved by the City or designee, temporary paving shall be placed the same day the trench is backfilled. The trench shall be backfilled up to a level 1 inch below the existing pavement surface and a temporary, cold mixed sand/asphalt pavement shall be constructed up to the level of the existing pavement surface. The liquid asphalt shall be Grade RC-70, conforming to the requirements of FDOT Specifications, Section 916-2. The sand shall conform to the requirements of FDOT Specifications, Section 902 for fine aggregate.

B. The cold mix is to be installed one block at a time, not crossing any intersection, or a maximum of 1,200 feet shall be completed before the Contractor may move forward

with This excavation Work. Backfill, compaction and temporary paving is to keep pace with the pipe installation. Written permission must be obtained from the City of OpaLocka Public Works Department to allow lengths greater than 1,200 feet. At the sole discretion of the City of Opa-Locka Public Works Department, the allowable limits in the permit may be reduced due to unforeseen right-of-way conditions.

C. The temporary pavement shall be maintained by the Contractor in a condition satisfactory to the City or designee until its removal. Removal shall include any surplus backfill material. Replacement of the temporary pavement with permanent pavement shall be made within 30 days. In replacing the temporary paving with permanent pavement, all Work shall be completed in sections compatible with specified traffic maintenance procedures.

D. The Contractor may elect to install a suitable temporary hot mix asphaltic pavement to be left in-place, in lieu of cold mix, when the hot mix asphalt is left in-place and installed over properly compacted limerock base course. This temporary pavement shall be incorporated into the specified permanent pavement restoration as part of paving restoration.

E. Sand seal on the limerock base course will not be permitted in lieu of temporary paving.

F. Unless otherwise approved by the City or designee, temporary paving shall be placed within twenty-four (24) hours following the completion of backfilling.

G. If temporary asphalt is utilized, it shall be removed prior to placement of final asphalt surface.

H. Temporary restoration requires field approval by City of Opa-Locka Public Works Department Field Inspector

3.0.10. STOCKPILED MATERIALS

A. Stockpile excavated material that is suitable for use as fill or backfill until material is needed.

B. Material suitable for backfill and not needed for backfill at the structure shall be stockpiled and later moved where needed.

C. Materials shall be stored and in such a manner that will not interfere unduly with City operations, traffic at the site, traffic on public roadways, or sidewalks and shall not be placed on private property. In congested areas, such materials that cannot be stored adjacent to the trench or used immediately as backfill shall be removed to other convenient places of storage acceptable to the City or designee at the Contractor’s expense.

D. Post signs indicating proposed use of material stockpiled. Post signs that are readable from all directions of approach to each stockpile. Signs should be clearly worded and readable by equipment operators from their normal seated position.

E. Confine stockpiles to within easements, right-of-way, and approved Work areas. Do not obstruct road or streets.

F. Do not stockpile excavated material adjacent to trenches and other excavations unless excavation side-slopes and excavation support systems are designed, constructed, and maintained for stockpile loads.

G. Do not stockpile excavated materials near or over existing facilities, adjacent property, or completed Work if weight of stockpiled material could induce excessive settlement.

H. Do not place stockpiles within 50 feet of inlets, streams, wetlands, bodies of water, etc. unless permitted by the City or designee.

I. Stockpile side slopes shall be no steeper than 3 horizontal : 1 vertical unless approved by the City or designee. Top of stockpile shall have a minimum slope of no less than 5% to promote positive drainage.

J. Provide perimeter erosion control measures around stockpiles, located no closer than 5- feet from toe of slope, and stabilized stockpile surface with temporary seeding or other measures if stockpile will remain inactive for more than seven (7) days.

3.0.11. BACKFILL

A. Place and compact granular bedding and fill over pipelines and conduits. Density tests for determination of the specified compaction shall be made by a testing laboratory approved by the City or designee. Testing of compacted fill materials is required in accordance with these Specifications. If results of tests taken during the progress of the Work indicate compacted materials do not meet specified requirements, such defective Work will be removed, replaced, and re-tested as directed by the City or designee and at the Contractor's sole expense. Compacted fill is to be tested before proceeding with the placement of surface materials.

B. Backfilling of pipe trenches will not be allowed until the Work has been approved by the City or designee, pressure tested if required, and the City or designee indicates that backfilling may proceed. Any Work which is covered or concealed without the knowledge and consent of the City or designee shall be uncovered or exposed for inspection. Partial backfill may be made to help restrain the pipe during pressure testing, if previously authorized by the City or designee.

C. The Contractor shall backfill all trenches and other excavations made in the process of installing the culvert. The Contractor shall maintain the surface of the backfill free from major irregularities and potholes.

D. The Contractor shall maintain trenches free of debris, wood, rocks over 2 inches in diameter, and water.

E. Backfill shall be in accordance with the Culvert Pipe Manufacturer's Standard Details, firstly, and FDOT if not specified. Material shall be placed in maximum 6-inch layers. Each layer shall be thoroughly compacted to at least 98% of maximum density as defined by AASHTO Specifications T-180. The material in the ditch may be compacted by either hand tamper or a mechanized power tamper, provided the results meet the requirements and are approved by the City or designee. Care shall be taken to preserve the alignment and gradient of the installed pipes.

F. A testing laboratory will make periodic field tests to determine the density being obtained in each lift of backfill. Testing shall be performed at a minimum frequency of one test every 10 feet. When compacted backfill fails to meet the specified percentage of maximum density as shown by test results, it shall be reworked and recompacted, and then retested. The reworking, recompacting, and retesting of the backfill shall be repeated as many times as may be necessary to obtain compacted backfill with density meeting or exceeding the specified percentage as indicated by test results.

G. The Contractor shall exercise proper care to ensure no pipe will be broken or displaced by use of mechanical compacting equipment. Water shall be added as required to obtain optimum moisture content to facilitate compaction but ponding or inundation of backfill will not be permitted.

H. In the event sufficient suitable material is not available at any point to properly backfill the trench, the Contractor shall transport suitable material from points of the line where such material is available or shall otherwise furnish suitable material.

3.0.12. ALTERNATE METHOD OF CONSTRUCTION

A. A combination of conditions in the substrata, water table, method of disposal or regulatory agency requirements may be encountered during the course of the work which makes dewatering impossible, or possible only through the use of unusual methods, the cost of which is excessive. When such conditions are encountered, but only after all reasonable means to dewater the excavation have been employed without success, the Contractor may request permission to employ the following Alternate Method of Construction. The concurrence of the Engineer shall be obtained in writing and shall limit the use of the Alternate Method of Construction to such specific portions of the work as the Engineer shall determine.

B. The requirements set forth in other Sections of these Specifications shall establish the required standards of construction quality for this work. Use of the Alternate Method

of Construction described hereinafter shall in no way be construed as relieving the Contractor of his basic responsibility for satisfactory completion of the work.

C. Under no conditions will any additional or increased payments be made to the Contractor for excavation, backfill, sheeting or any cost incurred for work or materials, or any other costs incurred as a result of the use of this alternate method of construction. The unit prices established in the Quotation shall be full payment for the various items of work.

D. Subject to all of the requirements stated herein, including written approval of the Engineer, construction will be permitted in accordance with the following specifications. All requirements of these Specifications shall apply to this construction unless otherwise specifically modified herein.

1. Removal of Water: The installation of pipe and appurtenances under water will be permitted and the dry-trench requirements of Section 6.06 "Removal of Water" will be waived.

2. Excavation: Excavation shall be performed in accordance with 3.0.2. "Excavation."

3. Pipe Bedding:

   a. Pipe bedding shall be placed from 6 inches below the outside bottom of the proposed pipe barrel up to the level of the lower one-third of the pipe barrel for pressure mains.

   b. The bedding material shall be pea rock, or drainfield limerock. Limerock screenings, sand or other fine organic material shall not be used.

   c. The bedding material shall be tamped and graded to provide a proper bedding for the pipe and shall then be shaped to receive the pipe. Bedding shall be provided under the branch of all fittings to furnish adequate support and bearing under the fittings.

4. Backfill:

   b. After the pipe is installed, backfilling shall proceed in accordance with the provisions of 2.0.1. “Materials”

   c. Select backfill material shall be used to backfill around the pipe and to a level one (1) foot above the crown of the pipe.

d. Under no circumstances will material other than select backfill or specified pipe bedding material be considered satisfactory for this purpose.

E. If the Alternate Method of Construction is used, all backfill material, including specified pipe bedding material, shall be carefully lifted into the trench and not released to fall freely therein until the bucket or container is at or just above water level. Under no circumstances will backfill material be dumped or pushed into trenches containing water. Below existing water level, and to a point not more than 18 inches above the water level the backfill material shall be carefully placed in uniform layers, of equal depth on each side of the pipe. From a point not more than 18 inches above the water level, and below the pavement base or the surface of the ground, if out of paved areas, backfill material shall be placed and compacted for normal backfilling as provided in 2.0.1. “Materials” for compacted backfill.

END OF SECTION

02371 RIP-RAP

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Construct riprap composed of sand-cement or rubble (consisting of broken stone or broken concrete) as shown in the Standard Plans and in the Plans.

PART 2 – PRODUCTS 2.0.1.

FILTER FABRIC

A. Use products listed on the FDOT’s APL.

B. Schedule work so that covering the fabric with the specified material does not exceed the manufacturer’s recommendations for exposure to ultraviolet light or five days, whichever is less. If the Engineer determines the exposure time was exceeded, the Contractor shall replace the fabric at no expense to the City.

C. Place the filter fabric (fabric) at locations as shown in the Plans, in accordance with the manufacturer’s directions. Place the fabric on areas with a uniform slope that are reasonably smooth, free from mounds, windrows, and any debris or projections which might damage the fabric.

D. Loosely lay the material. Do not stretch the material. Replace or repair any fabric damaged or displaced before or during placement of overlying layers. Repair in accordance with the manufacturer's instructions.

E. The Contractor may sew the seams to reduce overlaps as specified in 985-3. Follow the manufacturer’s instructions for all seams and overlaps.

2.0.2. PREPACKAGED SAND-CEMENT BAGS

A. Evenly proportioned sand and cement in the ratio of five cubic feet of sand to 94 pounds of cement. Material proportioned by mass shall use a sand density of 85 pounds per cubic foot.

B. Sealed package of 80 pounds of sand-cement in a bag.

C. Bag made of scrim-reinforced paper capable of holding the sand-cement without leakage.

D. Sand meets requirements of Section 902-3.3

E. Type I/II cement meets requirements of Section 921.

F. Prepackaged Sand-Cement Bags shall be one of the products listed on the FDOT’s Approved Product List. Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6. Include with the submittal a product data sheet, safety data sheet, product label, and a self-certified statement the product meets the requirements of this Section.

2.0.3. RUBBLE

A. Rubble (Bank and Shore Protection):

1. Provide sound, hard, durable rubble, free of open or incipient cracks, soft seams, or other structural defects, consisting of broken stone with a bulk specific gravity of at least 2.20. Ensure that stones are rough and angular.

2. For this application, use broken stone meeting the following gradation and thickness requirements:

Weight Maximum Pounds	Weight 50% Pounds	Weight Minimum Pounds	Minimum Blanket Thickness in Feet

670	290	60	2.5
Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds]. Ensure that at least 50% of the material by weight is greater than Weight 50% pounds]. Ensure that at least 85% of the material by weight is greater than Weight Minimum pounds.			

B. Rubble (Ditch Lining):

1. Use sound, hard, durable rubble, free of open or incipient cracks, soft seams, or other structural defects, consisting of broken stone or broken concrete with a bulk specific gravity of at least 1.90. Ensure that stones or broken concrete are rough and angular.

2. Use broken stone or broken concrete meeting the following gradation and thickness requirements:

Weight Maximum Pounds	Weight 50% Pounds	Weight Minimum Pounds	Minimum Blanket Thickness in Feet
75	30	4	1.5
Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds]. Ensure that at least 50% of the material by weight is greater than Weight 50% pounds]. Ensure that at least 90% of the material by weight is greater than Weight Minimum pounds.			

C. Physical Requirements of Broken Stone and Broken Concrete:

1. Use broken stone and broken concrete meeting the following physical requirements:

Absorption (FM 1-T 85)	Maximum 5%
Los Angeles Abrasion (ASTM C535)	Maximum loss 45%*
Soundness (Sodium Sulphate) (AASHTO T 104)	Maximum loss 12%** (after five cycles)
Flat and elongated pieces	Materials with least dimension less than one third of greatest dimension not exceeding 10% by weight.
Dirt and Fines	Materials less than 1/2 inch in maximum dimension accumulated from interledge layers, blasting or handling operations not exceeding 5% by weight.

Drop Test***(EM 1110-2-2302)	No new cracks developed, or no existing crack widened additional 0.1 inch, or final largest dimension greater than or equal to 90% original largest dimension of dropped piece.

* Ensure that granite does not have a loss greater than 55% and that broken concrete does not have a loss greater than 45%.

** The Engineer may accept rubble exceeding the soundness loss limitation if performance history shows that the material will be acceptable for the intended use. The Engineer will waive the soundness specification for rubble riprap (broken stone) when project documents indicate it will be placed in or adjacent to water or soil with a sulfate content less than 150 parts per million and a pH greater than 5.0. Soundness is not required for broken concrete.

*** The Engineer will waive the Drop Test unless required to ensure structural integrity. Provide all equipment, labor and testing at no expense to the City. EM refers to the US Army Corps of Engineer's Specification Engineering Method.

PART 3 – EXECUTION 3.0.1.

GEOTEXTILE FABRIC

A. Overlap adjacent strips of fabric a minimum of 24 inches, and anchor them with securing pins (as recommended by the manufacturer) inserted through both strips of fabric along a line through the midpoint of the overlap and to the extent necessary to prevent displacement of the fabric.

B. Place the fabric so that the upstream (upper) strip of fabric overlaps the downstream (lower) strip.

C. Stagger vertical laps a minimum of 5 feet. Use full rolls of fabric whenever possible in order to reduce the number of vertical laps.

D. Do not drop bedding stone or riprap from heights greater than 3 feet onto the fabric.

3.0.2 SAND-CEMENT BAGS

A. Place the bags with their ends all in the same direction. Lay the bags with broken joints, in a regular pattern. Ram or pack the bags against each other so as to form a close and molded contact. Remove and replace bags ripped or torn in placing with sound, unbroken bags. Then, thoroughly saturate all bags with water.
B. Immediately after watering, fill all openings between bags with dry grout composed of onepart Portland cement and five parts sand.
C. Use sand-cement bags for the toe walls if required. Fill the entire trench excavated for the toe walls with sand-cement bags.

3.0.3. RUBBLE

A. Dump rubble in place forming a compact layer conforming to the neat lines and thickness specified in the Plans. Ensure that rubble does not segregate so that smaller pieces evenly fill the voids between the larger pieces.

02510 ASPHALTIC CONCRETE PAVEMENT

PART 1 – GENERAL

1.0.2. SCOPE OF WORK

A. Construct asphaltic concrete pavement in accordance with the lines, grades and typical sections as indicated on the drawings, specified herein and as required for a complete installation.

B. Replace and / or repair all existing asphaltic concrete pavement areas impacted by Contractor operations, including trenching for new utilities, as well as damage that may result from Contractor operations during the progress of the work.

C. Temporary asphalt / trench repairs shall be installed within 1 week of excavation and backfill work on plant roadways impacted by construction.

1.0.3. SUBMITTALS

A. The Contractor shall submit its proposed formulae for the asphaltic concrete paving for review in accordance with the Section 01300 “Submittals”.

1.0.4. QUALITY CONTROL

A. Work shall be performed in accordance with Contract Documents, Drawings, and/or City of Opa-Locka Public Works Manual Specifications and Standard Details, in a neat and accurate manner. It is the intent of the City to obtain a complete and working installation according to these Specifications, and any items of labor, equipment, or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the project plans or stated herein.

B. Asphalt Acceptance Standards: The following minimum defects identified by the City or designee must be covered by warranty (but not limited to):

1. Sunken pavement patches greater than or equal to one-quarter (¼) inch (measured by a twelve (12) foot straight edge).

2. Surface raveling or oxidation due to deficiencies with the asphalt material.

3. Poor workmanship.

4. Inadequate compaction per Standards and Specifications.

1.0.5. RESTORATION LIMITS

A. At a minimum, sidewalk, curb, gutter, and roadway restoration shall be in accordance with the requirements of the agencies having jurisdiction including but not limited to City of Opa-Locka, Miami-Dade County, and FDOT.

B. The Contractor is responsible to restore the full lane width of two-lane roads when a trench is longitudinally cut within a lane. If the cut is in between two lanes, the Contractor is responsible to restore both lanes. If the cut impacts multiple lanes, all lanes impacted shall be restored. When a perpendicular cut is made crossing the pavement, a minimum of 25 feet width on each side of the cut, or to the intersection, must be restored by milling and resurfacing. For new developments, the Contractor shall restore the pavement from property line to property line.

C. At a minimum, the width of all asphalt repairs within the Work area shall extend at least 12 inches beyond the limit of the damage. Where the line for repaving for trenches extends 12-inches into the edge of the existing paving, repaving shall be to this edge only. Damage by the Contractor to the pavement beyond 12-inches into the edge of the existing paving will require the full lane be repaved.

D. The edge of the pavement shall be cut to a true edge with a saw or other acceptable method so as to provide a clean edge to abut the repair. The line of the repair shall be uniform with no irregularities. Repair of damage by the Contractor beyond the Work area shall be approved by the City or designee prior to commencing the Work.

E. Any base course or surface course beyond the restoration limits, damaged as a result of the Contractor's operation, shall be restored in accordance with the applicable requirements of these Specifications, to the satisfaction of the City or designee.

F. Permanent pavement repair shall be with edges straight and parallel and patches rectangular in plan. Replace any paving, beyond the limits shown in the details and as called for in the Specifications, as required. Where trenches are located out of the

existing pavement and damage occurs to the pavement, that pavement shall also be replaced by the Contractor.

G. Five Year Moratorium Directive from City: If the road is under Moratorium, the Contractor is to restore the entire roadway width.

H. Final asphalt application requires milling and resurfacing full travel lanes or as directed by City of Opa-Locka Public Works Department Field Inspector.

PART 2 – PRODUCTS 2.0.12.

MATERIALS

A. Subbase: Limit gradation of the material within the limits of the area being stabilized to 97% passing 3½-inch sieve. Soil shall be clean, non-deleterious material. Subbase material supporting the roadway and shoulders shall have a minimum LBR of 40. The stabilized subbase shall be 12 inches, placed in maximum compacted lift thickness of 8- inches, and compacted to 98% of maximum dry density as per AASHTO T-180.

B. Limerock Base Course

1. The material used in limerock base courses shall be material classified as either Miami Oolite Formation or Ocala Formation at the Contractor's option having a minimum of 70% calcium carbonate or magnesium carbonate; however, only one formation may be used on any contract.

2. Limerock base course shall have a minimum LBR of 100. Limerock base shall be twice the thickness of the existing adjacent base and shall be minimum of 12inches thick and a maximum of 18-inch thick, placed in 6-inch lifts. Base material shall be compacted to a density of not less than 98% of maximum dry density as per AASHTO T-180 under all paved areas.

3. The limerock material shall contain no more than 0.5% of organic material or objectionable matter and shall show no significant tendency to air slake or undergo any chemical under exposure to weather.

4. The maximum percentage of water sensitive clay material shall be three percent (3%).

5. At least 97% (by weight) of the material shall pass a 3½-inch sieve, and the material shall be graded uniformly down to dust. The fine material shall consist entirely of dust of fracture. All crushing or breaking up which might be necessary

in order to meet such size requirements shall be done before the material is placed on the road.

6. The limerock material shall be uniform in quality and shall not contain cherty or other extremely hard pieces, lumps, balls or pockets of sand or clay size material in sufficient quantity as to be detrimental to prevent proper bonding, finishing, or strength of the limerock base.

7. Limerock material shall be non-plastic, and the liquid limit shall not exceed 35.

C. Asphaltic Concrete

1. Bituminous Material: Asphalt cement, Viscosity Grade AC-20 or AC-30, shall conform with the requirements of FDOT Specifications, Section 916-1.

2. Coarse Aggregate: Coarse aggregate, stone or slag shall conform to the requirements of the FDOT Specifications, Section 901.

3. Fine aggregate: Fine aggregate shall conform to the requirements of FDOT Specifications, Section 902.3.

4. Mineral Filler: Mineral filler shall conform to the requirements of FDOT Specifications, Section 917-1 and 917-2.

5. Prime Coat: Unless otherwise indicated, the material used for the prime coat shall be cutback asphalt, Grade RC-70 or RC-250, and shall conform with the requirements specified in AASHTO Destination M 81. Unless otherwise indicated, the use of wither RC-70 or RC-250 shall be at the Contractor's option.

6. Tack Coat: The material used for the tack coat shall be Emulsified Asphalt, Grade RS-2 and shall conform with the requirements specified in AASHTO Designation M 140.

7. Where Type S Asphalt Concrete is specified in the Contract Documents, if approved by the City or designee, the equivalent fine Type SP Asphalt Concrete mixture (Traffic Level C) meeting the requirements of FDOT Specifications Section 334 may be selected as an alternate at no additional cost to the City or Owner. The equivalent mixes are as follows:

Type S-I……..Type SP-12.5 Type
S-II…….Type SP-19.0 Type
S-III……Type SP-9.5

2.0.13. TEXTURED PAVEMENT

A. “StreetBond SP150E Coating Material” refers to a high-performance premium coating material consisting of epoxy modified acrylic polymers blended with sand and aggregate, and specially formulated by GAF, Inc. (Tel. 1-800-766-3411), for application on asphalt surfaces to provide a durable, long lasting color and texture to the asphalt surface.

B. “StreetBond Colorant” is a highly concentrated, high quality, UV stable pigment blend designated to be added to StreetBond SP150E coating system to provide color to the coating. The colors to be used shall be shown on the Drawings. The same StreetBond Colorant shall be used in each SP150E coating layer to the asphalt surface. One pint of colorant shall be used with one pail of StreetBond coating material.

C. Use only patterned/textures pavement products listed on the Qualified Products List (QPL). Meet manufacturer’s Specifications for all pattern/texture templates, coating, and coloring material. Use only material that is delivered to the job site in sealed containers bearing the manufacture’s original labels. Material coating used to achieve the pattern/texture and/or color shall produce an adherent, weather resistant, skid resistant surface capable of resisting deformation to traffic. Paint and thermoplastic material must meet the requirements of this Specifications and FDOT Specifications Section 971, except that the requirements for Color and Retroreflectivity do not apply.

D. Manufacturers seeking approval for inclusion on the QPL must submit application and certifications in accordance with FDOT Specifications Section 6 along with the following documentation:

1. Manufacturer’s Specifications and procedures for materials and installation.

2. Manufacturer’s certification with supporting test data and results that the patterned/textured pavement installed in accordance with the manufacturer’s Specifications and procedures has been tested in accordance with the ASTM E274, Skid Resistance of Paved Surfaces using a standard ribbed full-scale tire at a speed of 40 mph (FN40R) and has a minimum FN40R value of 35.

PART 3 – EXECUTION

3.0.1. INSTALLATION OF ASPHALT

A. General

1. Pavement markings removed or obliterated by the Contractor’s operations shall be promptly replaced, in kind, to the satisfaction of the City of Opa-Locka Department of Public Works, Traffic Engineering Division or designee.

2. At least three density determinations shall be made on each day's final compaction operations on each course, and the density determinations shall be made at more frequent intervals if deemed necessary by the City or designee.

B. Subbase: Roadway subbase shall be stabilized to the minimum depth shown on the Drawings to a LBR not less than 40. Stabilizing shall be type C as defined in Section 160 of the FDOT specifications. Stabilization may require the addition and thorough mixing in of crushed limerock, coarse limerock screenings, or any other stabilizing material acceptable to the City or designee. The stabilizing material shall be applied in such quantity that, after mixing and blending, the subbase will have a LBR not less than 40. Stabilizing material shall be mixed or blended in the subbase material by plowing, scarifying, disking, harrowing, blading, and mixing with rotary tillers until the mixed materials are of uniform bearing ratio throughout the width and depth of the layer being processed. The minimum acceptable density at any location will be 98% of maximum dry density as determined by AASHTO T-180.

C. Limerock Base: The limerock base shall be constructed in accordance with Section 200 of the FDOT Specifications, to the thickness and width indicated on the Drawings. Pavement base shall be constructed in maximum 6-inch lifts.

D. After spreading of the base material is completed, the entire surface shall be scarified and shaped so as to produce the exact grade and cross section after compaction. For double course base, this scarifying shall extend a depth sufficient to penetrate slightly the surface of the first course. The maximum depth of each lift shall be 6-inches.

E. When the material does not have the proper moisture content to ensure the required density, wetting or drying shall be required. If the material is deficient in moisture, water will be added and uniformly mixed in by disking the base course to its full depth. If the material contains an excess of moisture, it shall be allowed to dry before being compacted. Wetting and drying operations shall involve manipulation of the entire width and depth of the base as a unit. As soon as proper conditions of moisture are attained, the material shall be compacted to an average density not less than 98% of maximum dry density as determined by AASHTO T-180. Where the base is being constructed in more than one course, the density shall be obtained in each lift of the base.

F. During final compacting operations, if blading of any areas is necessary to obtain the true grade and cross section, the compacting operations for such areas shall be completed prior to making the density determination on the finished base.

G. Unless otherwise directed by the City or designee, the surface shall be "hard-planed" with a blade grader immediately prior to the application of the prime coat to remove the thin glaze or cemented surface and to allow free penetration of the prime material. The materials planed from the base shall be removed from the base area.

H. If cracks or checks appear in the base, either before or after priming, which in the opinion of the City or designee, would impair the structural efficiency of the base course, the Contractor shall remove such cracks or checks by re-clarifying, reshaping, adding base material where necessary and re-compacting, at no additional cost to the City or Owner.

I. Mixing Base and Subbase: If at any time the subbase material shall become mixed with the base course material, the Contractor shall, without additional compensation, dig out and remove the mixture, reshape and compact the subbase and replace the materials removed with clean base material, which shall be shaped and compacted as specified above.

J. Prime Coat: The prime coat shall be applied at a rate of 0.15 gallons per square yard and the work performed in accordance with Section 300 of the FDOT Specifications.

K. Asphaltic Concrete: The spreading, compacting, and jointing the wearing surface shall be in accordance with Sections 330 and 333 of the FDOT Specifications to the thickness indicated on the Drawings.

L. Tack Coat: Apply tack coat at a rate between 0.02 and 0.10 gallons per square yard and perform the Work in accordance with Section 300 of the FDOT Specifications.

M. Connections with Existing Facilities Where the bituminous pavement is to be connected with an existing roadway surface or other facility, the Contractor shall modify the existing roadway profile in such a manner as to produce a smooth riding connection to the existing facility. Where it is necessary to remove existing asphalt surfaces to provide proper meet lines and riding surfaces, the Contractor shall saw cut the existing surface so that there will be sufficient depth to provide a minimum of 1inch of asphalt concrete, and the waste material shall be disposed of to the satisfaction of the City or designee. Prior to placing the asphalt concrete, these areas shall be tacked. Meet lines shall be straight and the edges vertical. The edges of meet line cuts shall be painted with liquid asphalt or emulsified asphalt prior to placing asphalt concrete. After placing the asphalt concrete, the meet line shall be sealed by painting with a liquid asphalt or emulsified asphalt and immediately covered with clean, dry sand.

N. Surface Tolerance

1. Tests for conformity with the specified grade shall be made immediately after initial compression. Any variation shall be immediately corrected by the removal or addition of materials and by continuous rolling. The completed surface of the pavement shall be of uniform texture, smooth, uniform as to grade, and free from defects of all kinds.

2. The completed surface shall not vary more than 1/8 inch from the lower edge of a 12-foot straightedge placed on the surface along the centerline or across the trench.

3. After completion of the final rolling, the smoothness and grade of the surface shall again be tested by the Contractor.

4. When deviations in excess of the above tolerances are found, the pavement surface shall be corrected as stated in Section 330-12.4 of the FDOT Specifications.

5. All areas in which the surface of the completed pavement deviates more than twice the allowable tolerances described above shall be removed and replaced to the satisfaction of the City or designee.

O. Weather Conditions: Asphalt shall not be applied to wet material. Asphalt shall not be applied during rainfall or any imminent storms that might adversely affect the construction. The Engineer will determine when surfaces and materials are dry enough to proceed with construction. Asphalt concrete shall not be placed during heavy rainfall or when the surface upon which it is to be placed is wet.

P. Protection of Structures and Adjustment of Appurtenances

1. Provide whatever protective coverings may be necessary to protect the exposed portions of bridges, culverts, curbs, gutters, posts, guard fences, road signs, and any other structures from splashing oil and asphalt from the paving operations. Remove any oil, asphalt, dirt, or any other undesirable matter that may come upon these structures by reason of the paving operations.

2. Where water valve boxes, manholes, catch basins, or other underground utility appurtenances are within the area to be surfaced, the Contractor shall adjust the covers of these improvements to conform to the proposed surface elevations.

3. In this effort, the Contractor shall be responsible for ensuring that appurtenances are brought to proper grade to conform to the finished surface elevations and any delays experienced from such obstructions will be considered as incidental to the paving operation. No additional payment will be made. Protect all covers during asphalt application.

Q. Pavement Warranty: Settlement of replaced pavement over trenches within the warranty period shall be considered the result of improper or inadequate compaction of the subbase or base materials. The Contractor shall promptly repair all pavement deficiencies noted during the warranty period at the Contractor’s sole expense.

R. The pressure distributor used for placing the tack or prime coat shall be equipped with pneumatic tires having sufficient width of rubber in contact with the road surface to avoid breaking the bond of or forming a rut in the surface. The distance between the centers of openings of the outside nozzles of the spray bar shall be equal to the width of the application required, within an allowable variation of 2-inches. The outside nozzle at each end of the spray bar shall have an area of opening of not less than 25 percent, nor more than 75 percent in excess of the other nozzles which shall have uniform openings. When the application covers less than the full width, the normal opening of the end nozzle at the conjunction line may remain the same as those of the interior nozzles.

S. Application Temperatures: For asphalt cement Viscosity Grade AC-5, the application temperature shall be between 300 degree and 350 degree F; for emulsified asphalt, between 100 degrees and 170 degrees F; and for cut-back asphalt, between 175 degree and 275 degree F.310-9.3 Uniformity of Distribution: Special precautions shall be observed to assure that an even and uniform distribution of bituminous material will be obtained, and the distributor shall be so adjusted and operated as to maintain uniform, even distribution of the type of material being applied. Excessive deposits of bituminous material upon the road surface caused by stopping or starting the distributor, by leakage or otherwise, shall be immediately removed.

T. When the prime or tack coat is applied adjacent to curb and gutter, or any other concrete or special pavement surface (except where they are to be covered with a bituminous wearing course) such concrete surfaces shall be protected by heavy paper or other protective material while the prime or tack coat is being applied. Any bituminous material deposited on such concrete surfaces shall be removed immediately.

U. No bituminous material shall be applied when the air temperature is less than 50 degree in the shade, or when the weather conditions or the condition of the existing surface is unsuitable. In no case shall bituminous material be applied while rain is falling or when there is water on the surface to be covered.

V. After the base has been finished, the full width of surface shall be swept with a power broom supplemented with hand brooms and mechanical blowers prior to the application of the prime coat. Care shall be taken to remove all loose dust, dirt and objectionable matter. If deemed necessary, the base shall be lightly sprinkled with water immediately in advance of the prime coat. The prim coat shall be applied to the full width of the base.

W. The temperature of the prime material shall be such as to insure uniform distribution. The material shall be applied with a pressure distributor as specified above. The amount to be applied shall be sufficient to coat the surface thoroughly and uniformly without any excess to form pools or to flow off the base. For lime rock base, the rate of application shall not be less than 0.10 gallons per square yard.

X. The roadway may be opened for use following the application of the prime material, and a light uniform application of clean sand shall be applied and rolled. The sand shall be non-plastic, shall be free from silt rock particles and shall not contain any sticks, vegetation, grass, roots or organic matter. After the sand covering has been applied, the surface will be opened to traffic.

Y. Asphalt Densities: The in place density of each course of asphalt mix construction, with the exceptions of patching courses, leveling and intermediate course less than one-inch thick or a specified spread rate less than 100 pounds per square yard, overbuild courses where the minimum thickness is less than one-inch, and opengraded friction course, shall be determined by the use of the Nuclear Density Backscatter Methods as specified by FM 1-T238 (method B). The required density of a completed course shall be at least 98 percent of the average density of the control strip.

3.0.2. INSTALLATION OF TEXTURED PAVEMENT

A. Applications of textured pavement include the following. Imprinting patterns into existing or new pavement and covering with a surface coating(s) of paint or thermoplastic. Imprinting patterns into existing or new pavement and inlaying the imprint with performed thermoplastic material. Colored, preprinted, preformed texturized thermoplastic material that is applied over existing pavement. Colored thermoplastic material that can be imprinted and texturized during or after application to existing pavement.

B. Patterns are defined as visible surface markings. Imprinted textures are defined as palpable surface markings.

C. Use the location, pattern/texture type (brick, stone, etc.) and coating color as specified in the Plans. Joint openings shall not exceed ½ inch in width.

D. Apply a patterned and/or textured treatment to asphalt or concrete in accordance with manufacturer's recommendations.

E. For application requiring removal and replacement of existing pavement, meet the requirements of FDOT Specifications Section 350 for cement concrete pavement; the requirements of Section 334 for Superpave asphalt or Section 337 for FC 9.5 and FC 12.5 asphalt.

F. Protect treated surfaces from traffic and environmental effect until the area is completely coated/imprinted and any coating have dried or cured according to the manufacturer's instructions. Complete all utility, traffic loop detector, and other items requiring a cut and installation under the finished surface, prior to pattern installation.

For asphalt roadways, apply patterned/textured pavement a minimum of 14 days after placement of the adjacent pavement. Upon completion of the installation, the City or designee will check the area at random location(s) for geometric accuracy, as specified in the plans. If any of the chosen areas have an imprint width and depth that is less than the manufacturer's specifications, correct the entire textured area, at no additional cost to the City. Supply the specified pattern and color sample for the Engineer's use to visually determine that the material matches the color specified in the plans. For any continuous or abutting areas, i.e., all treated areas of an intersection, color material must be from the same lot/batch. Provide certification that the textured pavement was installed in accordance with the manufacturer's requirements.

G. Textured pavement on crosswalks and travel lanes are to be tested for skid resistance in accordance with ASTM E303.

3.0.3. TEMPORARY TRENCH REPAIR OR STABILIZATION

A. Following trenching and backfill within active plant roadways, but prior to final asphalt replacement at substantial completion, the Contractor shall install temporary trench repair, consisting of compacted base course and temporary asphalt.

B. Temporary trench repair shall include the preparation of the subgrade, the placing and compacting of the lime rock base, the priming of the base, the placing and maintaining of the surface treatment, all as specified herein.

C. The width of trench repairs shall extend at least 12 inches each side beyond the limits of the asphalt impacted by excavation. The edge of the pavement to be left in place shall be cut to a true edge with a saw or other approved method so as to provide a clean edge to abut the repair. The line of the repair shall be reasonably uniform with no unnecessary irregularities.

3.0.4. PAVEMENT MARKINGS

A. All existing markings (i.e., lanes, edge of pavement, parking stalls, etc.) impacted by the Contractor during construction shall be replaced with new painted items in accordance with the requirements of Section 971 of the FDOT Specifications.

3.0.5. CONNECTIONS WITH EXISTING FACILITIES

A. Where the bituminous pavement is to be connected with an existing roadway surface or other facility, the Contractor shall modify the existing roadway profile in such a manner as to produce a smooth riding connection to the existing facility.

B. Where it is necessary to remove existing asphalt surfaces to provide proper meet lines and riding surfaces, the Contractor shall saw cut the existing surface so that there will be sufficient depth to provide a minimum of 1-inch of asphalt concrete, and the waste

material shall be disposed of to the satisfaction of the Engineer. Prior to placing the asphalt concrete, these areas shall be tacked. Meet lines shall be straight and the edges vertical. The edges of meet line cuts shall be painted with liquid asphalt or emulsified asphalt prior to placing asphalt concrete. After placing the asphalt concrete, the meet line shall be sealed by painting with a liquid asphalt or emulsified asphalt and immediately covered with clean, dry sand.

3.0.6. SURFACE TOLERANCE

A. Tests for conformity with the specified grade shall be made immediately after initial compression. Any variation shall be immediately corrected by the removal or addition of materials and by continuous rolling.

B. The completed surface of the pavement shall be of uniform texture, smooth, uniform as to grade, and free from defects of all kinds. The completed surface shall not vary more than 1/8 inch from the lower edge of a 12-foot straightedge placed on the surface along the centerline or across the trench.

C. After completion of the final rolling, the smoothness and grade of the surface shall again be tested by the Contractor.

D. When deviations in excess of the above tolerances are found, the pavement surface shall be corrected as stated in Section 330-12.4 of the FDOT Specifications.

E. All areas in which the surface of the completed pavement deviates more than twice the allowable tolerances described above shall be removed and replaced to the satisfaction of the Engineer.

3.0.7. WEATHER CONDITIONS

A. Asphalt shall not be applied to wet material. Asphalt shall not be applied during rainfall or any imminent storms that might adversely affect the construction. The Engineer will determine when surfaces and materials are dry enough to proceed with construction. Asphalt concrete shall not be placed during heavy rainfall or when the surface upon which it is to be placed is wet.

3.0.8. PROTECTION OF STRUCTURES AND ADJUSTMENT OF APPURTENANCES

A. Provide whatever protective coverings may be necessary to protect the exposed portions of bridges, culverts, curbs, gutters, posts, guard fences, road signs, and any other structures from splashing oil and asphalt from the paving operations. Remove any oil, asphalt, dirt, or any other undesirable matter that may come upon these structures by reason of the paving operations.

B. Where water valve boxes, catch basins, or other underground utility appurtenances are within the area to be surfaced, the Contractor shall adjust the covers of these improvements to conform to the proposed surface elevations.

C. In this effort, the Contractor shall be responsible for ensuring that appurtenances are brought to proper grade to conform to the finished surface elevations and any delays experienced from such obstructions will be considered as incidental to the paving operation. No additional payment will be made. Protect all covers during asphalt application.

3.0.9. PAVEMENT WARRANTY

A. Settlement of replaced pavement over trenches within the warranty period shall be considered the result of improper or inadequate compaction of the sub-base or base materials. The Contractor shall promptly repair all pavement deficiencies noted during the warranty period at the Contractor's sole expense.

3.0.10. INSTALLATION OF TEXTURED PAVEMENT

H. Applications of textured pavement include the following.

22. Imprinting patterns into existing or new pavement and covering with a surface coating(s) of paint or thermoplastic.

23. Imprinting patterns into existing or new pavement and inlaying the imprint with performed thermoplastic material.

24. Colored, preprinted, preformed texturized thermoplastic material that is applied over existing pavement.

25. Colored thermoplastic material that can be imprinted and texturized during or after application to existing pavement.

I. Patterns are defined as visible surface markings. Imprinted textures are defined as palpable surface markings.

J. Use the location, pattern/texture type (brick, stone, etc.) and coating color as specified in the Plans. Joint openings shall not exceed ½ inch in width.

K. Apply a patterned and/or textured treatment to asphalt or concrete in accordance with manufacturer's recommendations.

L. For application requiring removal and replacement of existing pavement, meet the requirements of FDOT Specifications Section 350 for cement concrete pavement; the

requirements of Section 334 for Superpave asphalt or Section 337 for FC 9.5 and FC 12.5 asphalt.

M. Protect treated surfaces from traffic and environmental effect until the area is completely coated/imprinted and any coating have dried or cured according to the manufacturer's instructions. Complete all utility, traffic loop detector, and other items requiring a cut and installation under the finished surface, prior to pattern installation. For asphalt roadways, apply patterned/textured pavement a minimum of 14 days after placement of the adjacent pavement. Upon completion of the installation, the City or designee will check the area at random location(s) for geometric accuracy, as specified in the plans. If any of the chosen areas have an imprint width and depth that is less than the manufacturer's specifications, correct the entire textured area, at no additional cost to the City. Supply the specified pattern and color sample for the Engineer's use to visually determine that the material matches the color specified in the plans. For any continuous or abutting areas, i.e., all treated areas of an intersection, color material must be from the same lot/batch. Provide certification that the textured pavement was installed in accordance with the manufacturer's requirements.

N. Textured pavement on crosswalks and travel lanes are to be tested for skid resistance in accordance with ASTM E303.

END OF SECTION

02526 CONCRETE PAVEMENT, CURB AND WALKWAYS

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Concrete pavement, curbs and sidewalk shall be constructed to the lines and grades and dimensions required for a complete installation as shown on the drawings and specified herein.

1.0.2. SUBMITTALS

A. Shop drawings for reinforcing, joint material and mix designs shall be submitted for review in accordance with the Section 01300 "Submittals".

PART 2 – PRODUCTS

2.0.2. MATERIALS

A. All roadways are to be de-mucked or stabilized with geotextile material in accordance with the geotechnical report and City requirements.

B. Laboratory analysis shall be complete, and the material approved by the Engineer prior to placement.

B. Geotextile material: Woven fabric to be structurally prepared and placed as per manufactures written specification.

C. Sub-grade: limited to maximum six (6") diameter clean non deleterious material Sub grade to be proof-rolled. Subgrade material supporting the roadway and shoulders shall have a minimum lime rock bearing (LBR) of 40. The stabilized subgrade shall be twelve (12) inches compacted to 98% of maximum dry density as per AASHTO-T-180.

D. Lime rock: The material used in lime rock base courses shall be material classified as either Miami Oolite Formation or Ocala Formation at the Contractor's option having a minimum percentage of calcium or magnesium of 60; however, only one formation may be used on any contract. Lime rock base course shall have a minimum bearing ratio (LBR) of 100 and shall be minimum of eight (8) inches thick. Base material shall be compacted to a density of not less than 98% of maximum dry density as determined by AASHTO-T180 under all paved areas.

1. Composition:

    a. The lime rock material shall contain not more that 0.5 percent of organic material or objectionable matter and shall show no significant tendency to air slake or undergo any chemical under exposure to weather.

    b. Lime rock material shall contain not less than 70 percent of carbonates of calcium and magnesium. The maximum percentage of water sensitive clay material shall be three (3).

2. Gradation: At least 97 percent (by weight) of the material shall pass a 3 1/2-inch sieve and the material shall be graded uniformly down to dust. The fine material shall consist entirely of dust of fracture. All crushing or breaking up which might be necessary in order to meet such size requirements shall be done before the material is placed on the road.

3. Quality:

a. The lime rock material shall be uniform in quality and shall not contain cherty or other extremely hard pieces or lumps, balls or pockets of sand or clay size material in sufficient as to be detrimental to prevent proper bonding, finishing or strength of the lime rock base. Lime rock material shall be nonplastic, and the liquid limit shall not exceed 35.

b. Lime rock material shall have an average LBR value of not less than 100.

E. Sidewalks:

1. The replacement of gray concrete sidewalks throughout the City shall be with the Miami-Dade County's sidewalk color standard, unless otherwise specified by any applicable City land use board, in accordance with Resolution 2019-30800.

2. The Public Works Director has the authority to determine on a street-by-street basis if replacement of sidewalks to Miami-Dade County's sidewalk color standard is appropriate.

2.0.1. CONCRETE

A. Concrete shall be composed of cement, fine aggregate, coarse aggregate, and water, so proportioned and mixed as to produce a plastic workable mixture in accordance with all requirements under this section suitable to the specific conditions of placement.

B. Cement:

1. The cement shall be a standard brand of Portland cement manufactured within the continental limits of the United States. It shall meet the requirements of ASTM C150 "Portland Cement" and shall be Type II.

2. Only one brand of cement shall be used in any individual structure unless approved by the Engineer. Cement which has become damaged, partially set, and lumpy or caked shall not be used the entire contents of the sack or container which contains such cement will be rejected. No salvage or reclaimed cement shall be used.

3. Different types of cement shall not be mixed nor shall they be used alternately except when authorized in writing by the City or their designee. Different brands of cement or the same brand from different mills may be used alternately. A resubmittal will be required if different cements are proposed during the Project.
4. Slump shall not exceed six inches (6").

5. Concrete for underground work shall be acid resistant cement and shall maintain a minimum compressive strength of 4000 psi in 28 days.

6. The total alkalies in the cement (calculated as the percentage of NA2O plus 0.658 times the percentage of K2O) shall not exceed 0.40%.

7. The proposed Portland Cement shall not contain more than 8% tricalcium aluminate and more than 12% tetracalcium aluminoferrite.

8. Cement shall be stored in a suitable weather-tight building so as to prevent deterioration or contamination. Cement which has become caked, partially hydrated, or otherwise damaged will be rejected. The Contractor shall provide suitable means for storing and protecting the cement against dampness. Bags of cement which for any reason may become partially set, or which contain lumps of caked cement, shall be rejected. In no instance shall any portion of a bag of damaged cement, or a bag containing lumps of caked cement, be used. Cement salvaged from discarded or used sacks shall not be used. Different brands of cement, even if tested and approved, shall not be mixed during use, nor used alternately in any section of the work without written permission of the Engineer.

C. Aggregates:

1. Fine Aggregate (Sand) in the various concrete mixes shall consist of natural or manufactured siliceous sand, clean and free from deleterious substances, and graded within the limits of ASTM C33.

2. Coarse Aggregate: Coarse aggregate shall consist of gravel, broken stone or local limerock. Coarse aggregate shall be size #57 or #67 as graded within the limits given in ASTM C33 unless otherwise specified. It shall be free from adherent coatings.

3. Aggregates shall be tested for gradation by sieve analysis tests in conformance with ASTM C136.

4. When tested for soundness in accordance with ASTM C88, the loss resulting after five cycles shall not exceed 10 percent for fine or coarse aggregate when using either magnesium sulfate or sodium sulfate.

5. When tested in accordance with "Potential Reactivity of Aggregates (Chemical Method)" (ASTM C289), the ratio of silica released to reduction in alkalinity shall not exceed 1.0. F. When tested in accordance with "Organic Impurities in Sands for Concrete" (ASTM C40), the fine aggregate shall produce a color in the supernatant liquid no darker than the reference standard color solution.

6. When tested in accordance with "Resistance to Abrasion of Small size Coarse Aggregate by Use of the Los Angeles Machine" (ASTM C131), the coarse aggregate shall show a loss not exceeding 42 percent after 500 revolutions, or

10.5 percent after 100 revolutions

D. Water: Water shall be taken from a potable water supply and shall be fresh, clean and free from injurious amounts of oil, acid, alkali or organic matter.

E. Admixtures:

26. Air entraining agent shall be added to all concrete unless noted otherwise. The agent shall provide entrained air in the concrete in accordance with ASTM C260.

27. The following admixtures are required or used for water reduction, slump increase, and/or adjustment of initial set. Admixtures permitted shall confirm to the requirements of ASTM C494. Admixtures shall be non-toxic after 30 days and shall be compatible with and made by the same manufacturer as the air-entraining admixtures.

a. Water reducing admixture shall conform to ASTM C494, Type A and shall contain no more than 0.05% chloride ions. Acceptable products are “Eucon Series” by the Euclid Chemical Company, “Master Pozzolith Series” by BASF, and “Plastocrete Series” by Sika Corporation.

b. High range water reducer shall be sulfonated polymer conforming to ASTM C494, Type F or G. The high range water reducer shall be added to the concrete at either the batch plant or at the job site and may be used in conjunction with a water reducing admixture. The high range water reducer shall be accurately measured and pressure injected into the mixer as a single dose by an experienced technician. A standby system shall be provided and tested prior to each day’s operation of the job site system. Concrete shall be mixed at mixing speed for a minimum of 100 mixer revolutions after the addition of the high range water reducer. Acceptable products are “Eucon 37” or Plastol 5000 by the Euclid Chemical Company, “Master Rheobuild 1000 or Master Glenium Series” by BASF, and “Daracem 100 or Advaflow Series” by W.R. Grace. High range water reducer shall be mandatory for class A1 concrete intended for placement in walls.

c. A non-chloride, non-corrosive accelerating admixture may be used where specifically approved by the City or their designee. The admixture shall conform to ASTM C494, Type C or E, and shall not contain more chloride ions than are present in municipal drinking water. The admixture manufacturer must have longterm noncorrosive test data from an independent testing laboratory (of at least a year’s duration) using an acceptable accelerated corrosion test method such as that using electrical potential measures. Acceptable products are “Accelguard 80/90 or NCA” by the Euclid Chemical Company and “Daraset” by W.R. Grace.

d. A water reducing retarding admixture may be used where specifically approved by the Engineer. The admixture shall conform to ASTM C494, Type D and shall not

contain more than 0.05% chloride ions. Acceptable products are “Eucon NR or Eucon Retarder 100” by the Euclid Chemical Company, “Pozzolith Retarder” by BASF, and “Plastiment” by Sika Corporation.

28. Admixtures containing calcium chloride, thiocyanate or more than 0.05 chloride ions are not permitted

F. Membrane Curing Compound: Membrane curing compound shall conform to the requirements of AASHTO Designation M 148, Type 1-clear, or type 2-white pigmented.

G. Expansion Joint Filler:

1. Preformed expansion joint filler shall be of the nonextruding and resilient bituminous type and conform to the requirements of AASHTO Designation M 213.

2. Expansion joint filler shall be gray neoprene sponge rubber that conforms to AASHTO Designation M 153, Type I.

H. Reinforcing and Welded Wire Fabric: Reinforcing and welded wire fabric shall be 6”X6” – 10/10 steel bars to be used in curb & gutter and wire mesh in sidewalk.

2.0.2. CONCRETE PAVERS

A. Concrete pavers shall Miami-Dade County’s color standard approved equal. Use of other colors to complement project design theme and/or match existing pavers’ configuration require shall only be used with written approval from the City of OpaLocka Beach Public Works Department.

B. All concrete pavers shall have a skid resistant finish.

C. Provide products supplied by a member of the Interlocking Concrete Pavement Institute (ICPI) as called for in the Drawings and/or as specified herein.

D. Concrete pavers shall conform to the requirements of ASTM C936.

E. Concrete pavers shall have an average compressive strength of 8,000 psi with no individual unit under 7,200 psi.

F. Average absorption of 5% with no unit greater than 7% when tested in accordance with ASTM C140.

2.0.3. TEXTURED PAVEMENT

A. “Street Bond SP150E Coating Material” refers to a high performance premium coating material consisting of epoxy modified acrylic polymers blended with sand and aggregate, and specially formulated by Integrated Paving Concept, Inc. (Tel. 800-6885652), for application on asphalt surfaces to provide a durable, long lasting color and texture to the asphalt surface.

B. “Street Bond Colorant” is a highly concentrated, high quality, UV stable pigment blend designated to be added to Street Bond SP150E coating system to provide color to the coating. The colors to be used shall be shown on the drawings. The same Street Bond Colorant shall be used in each SP150E coating layer to the asphalt surface. One pint of colorant shall be used with one pail of Street Bond coating material.

C. Use only patterned/textures pavement products listed on the Qualified Products List (QPL). Meet manufacturer’s Specifications for all pattern/texture templates, coating, and coloring material. Use only material that is delivered to the job site in sealed containers bearing the manufacture’s original labels. Material coating used to achieve the pattern/texture and/or color shall produce an adherent, weather resistant, skid resistant surface capable of resisting deformation to traffic. Paint and thermoplastic material must meet the requirements of this Specifications and FDOT Specifications Section 971, except that the requirements for Color and Retroreflectivity do not apply.

D. Manufacturers seeking approval for inclusion on the QPL must submit application and certifications in accordance with Section 6 along with the following documentation:

1. Manufacturer’s specifications and procedures for materials and installation.

2. Manufacturer’s certification with supporting test data and results that the patterned/textured pavement installed in accordance with the manufacturer’s specifications and procedures has been tested in accordance with the ASTM E274, Skid Resistance of Paved Surfaces using a standard ribbed full scale tire at a speed of 40 mph (FN40R), and has a minimum FN40R value of 35.

PART 3 – EXECUTION

3.0.1. INSTALLATION OF ROADWAY MATERIALS

A. Subgrade: The work shall consist of bringing the bottom of the excavations and the top of the embankments of the roadways between the outer limits of the roadway to a surface conforming to the lines, grades, and cross sections shown on the plans, of uniform required density, ready to receive the base or paving course. The final elevation of the subgrade shall be within 0.1 foot of the required elevation.

1. All submerged stumps, roots, and other unsuitable matter encountered in the preparation of the subgrade shall be removed and replaced with a suitable material.

2. The material in the top 12” of subgrade shall have a minimum CBR of 25 when compacted to 95% of maximum density as determined by AASHTO Specification T 180-74. In areas such a condition does not exist, the top 12” of subgrade shall be stabilized as described below:

3. Stabilizing Material: Where stabilized subgrade and shoulders are required, the subgrade and shoulder material shall have a minimum California Bearing Ratio Material Value not less than 25. If the in place subgrade or shoulder material has a CBR value less than 25, a suitable stabilizing material shall be added. Such stabilizing material shall be crushed lime rock, coarse lime rock screenings, or any other stabilizing material approved by the Engineer.

4. Suitable stabilizing materials obtained from an existing base or pavement which is to be replaced or abandoned may be used providing that such material contain no fragments larger than 3 ½ inches in diameter.

5. The entire subgrade, including 2 feet beyond the edge of the proposed pavement, shall be thoroughly plowed, scarified, and mixed to a depth of not less than 6 inches below grade. All pot holes and other irregularities shall be filled with suitable material or trimmed down as the case may be, prior to compacting. If the area is cut to grade in natural lime rock, the top 6 inches shall be thoroughly plowed, scarified, and mixed. This plowed, scarified, and mixed layer shall be compacted to not less than 95 percent of the maximum density as determined by AASHTO Specifications T 180-74 prior to the placement of the base course.

6. After the subgrade has been prepared as specified above, the Contractor shall maintain it free from ruts, depressions, and damage resulting from the hauling and handling of any material, equipment, tools, etc. Ditches or drains shall be constructed and maintained along the completed subgrade section. Just before the base course is laid, the subgrade shall be tested as to, elevation and density.

B. Transporting Lime rock: The lime rock shall be transported to the point where it is to be used, over rock previously placed if practicable, and dumped on the end of the preceding spread. No hauling over the subgrade or dumping on the subgrade shall be done

C. Spreading Lime rock:

1. When using new material, the lime rock shall be spread uniformly, and all segregated areas of fine or coarse rock shall be removed and replaced with wellgrade rock.

2. When the specified compacted thickness of the base is greater than 6-inches, the base shall be constructed in two courses. The thickness of the first course shall be approximately one-half the total thickness of the finished base, or enough additional to bear the weight of the construction equipment without disturbing the subgrade.

3. When using the existing base material, the Contractor shall expose the existing base material to the final base grade shown on the drawings. The Contractor shall then proceed with scarifying the top 6 inches of the base and reworking and compacting the material to achieve the required cross-section.

4. Minimum longitudinal slope shall be 0.3% for all roadways. For roadways with gutters, the longitudinal slope may be reduced upon approval by the Public Works Department.

D. Compacting and Finishing Base:

1. General:

a. For single course base, after spreading is completed, the entire surface shall be scarified and then shaped so as to produce the required grade and cross section after compacting.

b. For multi lift base course, the first course shall be four (4) inches thick compacted cleaned of foreign material, bladed and brought to a surface cross section approximately parallel to that of the finished base. Prior to the spreading of any material for the upper course, the density test for the lower course shall be made and the Engineer shall have determined that the required compacting has been obtained. After the spreading of material for the second course is completed, its surface shall be finished and shaped so as to produce the required grade and cross section after compacting and free of scab and laminations.

2. Moisture Content: When the material does not have the proper moisture content to insure the required density, wetting or drying will be required. If the material is deficient in moisture, water shall be added and uniformly mixed in by discing the base course to its full depth. If the material contains an excess of moisture, such excess shall be reduced or removed until the required moisture content is attained before being compacted. Wetting or drying operations shall involve manipulation of the entire width and depth of the base as a unit.

3. Density Requirements: As soon as proper conditions of moisture are attained, the material shall be compacted to a density of not less than 98 percent of the

maximum density as determined by AASHTO Designation T-180 as described below:

a. During final compacting operations, if blading of any areas is necessary to obtain the true grade and cross section, the compacting operations for such areas shall be completed prior to making the density determinations on the finished base.

b. At least three density determinations shall be made at the completion of each course, also the density determinations shall be made at new/replaced every utility crossings and also at every 7,000 square feet of roadways or at more frequent intervals if deemed necessary by the Engineer.

4. Correction of Defects:

a. If at any time the subgrade material should become mixed with the base course material, the Contractor shall dig out and remove the mixture, reshape and compact the subgrade and replace the materials removed with clean base material, which shall be shaped and compacted as specified above.

b. If cracks or checks appear in the base, either before or after priming, which in the opinion of the Engineer would impair the structural efficiency of the base course, the Contractor shall remove such cracks or check by re-scarifying, reshaping, adding base material where necessary and recompacting.

E. Testing Surface: The finished surface of the base course shall be checked with a templet cut to required crown and cross section and with a 10-foot straightedge laid parallel to the centerline of the road. All irregularities greater than 1/4-inch shall be corrected by scarifying and removing or adding lime rock as may be required, after which the entire area shall be recompacted as specified herein before.

F. Thickness Determinations:

The thickness of the compacted lime rock base shall be measured at intervals of not more than 200-feet. Measurements shall be taken at various points on the cross sections prior to the application of the prime coat.

2. The measurements shall be taken in holes through the base of not less than 3inches in diameter. Where the compacted base is deficient by more than 1/2-inch from the thickness called for on the drawings, the Contractor shall correct such areas by scarifying and adding lime rock. The base shall be scarified and rock added for a distance of 100-feet in each direction from the edge of the deficient area. The affected areas shall then be brought to the required state of compaction and to the required thickness and cross section.

G. Priming and Maintaining:

1. The prime coat shall be applied only when the base meets the specified density requirements and the moisture content in the top half of the base does not exceed 90 percent of the optimum moisture content of the base material. At the time of priming, the base shall be firm and unyielding.

2. The Contractor will be responsible for assuring that the true crown and grade are maintained with no rutting or other distortion and that the base meets all the requirements at the time the surface course is applied.

3.0.2. INSTALLATION OF CONCRETE

A. The concrete shall be placed on stabilizing or compacted subgrade to such depth that, when it is consolidated and finished, the slab thickness required by the drawings will be obtained at all points and surface will at no point be below the grade specified for the finished surface, after application of the allowable tolerance. The concrete shall be deposited on the stabilized subgrade in a manner which will require as little rehandling as possible. Placing of the concrete shall be continuous between transverse joints, without the use of intermediate bulkheads.

B. Steel reinforcement is called for on the drawings shall be placed at mid slab depth and the fabric shall be maintained at this location during the placing and finishing operations.

C. Concrete shall be thoroughly consolidated against and along the faces of all forms, and along the full length and on both sides of all joint assemblies, by means of hand operated, vibrators. Vibrators shall not be permitted to come in contact with joint assembly, the subgrade or a side form. Vibration at any one location shall not continue so long as to produce puddling or the accumulation of excessive grout on the surface. In no case shall the vibrator be operated longer than 15 seconds in any one location.

1.

D. Coloring of concrete shall be done by dry-mixing the compound and broadcasting over the fresh-poured concrete after it has been struck off.

E. Striking off, Consolidating and Finishing Concrete:

1. Immediately after the placing, the concrete shall be struck off, consolidated and finished, to produce a finished pavement conforming to the cross section, width and surface finish required by the drawings and specifications. The sequence of operations shall be as follows: strike-off; vibratory consolidation; screeding; floating; removal of laitance; straight edging; and final surface finish. Strike-off, consolidation and finishing shall be accomplished in a manner such as to avoid damage to, or misalignment of, joint assemblies, dowels and other embedded items.

F. Straight edging and Surface Correction:

1. After floating has been completed and the excess water removed, but while the concrete is still in a plastic state, the surface of the concrete shall be tested for trueness with an accurate 10-foot straightedge. The straightedge shall be furnished by the Contractor. The straightedge shall be held in successive positions parallel to the road center line, in contact with the surface, and the whole area tested from one side of the slab to the other as necessary. The advance along the road shall be in successive stages of not more than one-half the length of the straightedge. Any depressions shall be immediately filled with freshly mixed concrete and struck-off, consolidated and refinished. High areas shall be cut down and refinished. Straightedge testing and surface correction shall continue until the entire surface appears to conform to the required grade and cross section.

2. As soon as the concrete has hardened sufficiently to be walked on, straight edging shall again be done. All surface irregularities exceeding ¼-inch in a 10-foot shall be corrected by grinding as directed by the Engineer.

G. Final Finish: As soon as the water sheen has disappeared from the surface of the pavement and just before the concrete becomes non-plastic, a light broom finish shall be given to the surface.

H. Edging:

1. After the final finish has been applied, but before the concrete has become nonplastic, the edge of the pavement along each side of the strip being placed, on each side of transverse and longitudinal contraction joints and construction joints and along structure extending into the pavement, shall be carefully rounded to a ¼-inch radius except as otherwise indicated. A well-defined and continuous radius shall be produced and a smooth, dense mortar finish obtained. All concrete shall be completely removed from the top of the joint filler.

2. All joints shall be checked with a straightedge before the concrete has become non-plastic and, if one side of the joint is higher than the other or the entire joints is higher or lower than the adjacent slabs, corrections shall be made as necessary.

I. Joints:

Transverse Construction Joints: Transverse construction joints shall be constructed at the end of all pours and at other locations where the paving operations are stopped for as long as 30 minutes. Construction joints, however, shall not be placed within ten feet of any other transverse joint or of either end of a section of pavement. If sufficient concrete has not been placed to form a slab at least ten feet long, the excess concrete, back to the last preceding joint, shall be removed. The joints shall be formed by placing a wood or metal bulkhead accurately and securely in place, in a plane perpendicular to the profile and center line of the pavement.

2. Transverse & Longitudinal Contraction Joints: Construction joints shall be constructed at the interval indicated in the plans and shall consist of planes of weakness created by an edging tool. The cut in the fresh concrete shall be perpendicular to the surface of the pavement, shall extend to a depth of 1/3 of its thickness (1 ½" for 4" pavement) and shall have tooled edges as described above.

3. Expansion Joints: ½" Expansion Joints shall be formed by placing performed joint filler around all structures and foundations where pavement abuts curbs and gutters and at intervals not to exceed 100'.

4. Cleaning and Sealing Joints: Joints which are to be sealed, shall be filled with joint sealing material before the pavement is opened to traffic and as soon after completion of the curing period as is feasible. Just prior to sealing, each joint shall be thoroughly cleaned of all foreign material (including any membrane curing compound) and the joint faces shall be clean and surface-dry when the sealer is applied.

a. The sealing material shall be applied to each joint to conform to the details shown on the drawings and in accordance with the manufacture's recommendation. The pouring shall be done in such manner that the material will not be spilled on the exposed surfaces of the concrete. Any excess material on the surface of the concrete pavement shall be removed immediately and the pavement surface cleaned.

b. All cracks occurring in the pavement prior to its acceptance shall be cleaned out and sealed as specified above, except that the cracks and fractures shall be completely filled with joints sealer and any excess filler material cut down level with the pavement surface.

1.

3.0.3. INSTALLATION OF CONCRETE PAVERS

A. Install paver blocks as manufactured by licensee of Paver Systems, Inc., in accordance with the Drawings, manufacturer's recommendations, and Standard Details. Paver block construction shall conform to the requirements of Interlocking Concrete Pavers Institute (ICPI).

B. Where necessary to cut blocks, cutting shall be done so as leave tight joint along all adjacent edges and surfaces. Smoothly split or sawn blocks only will be accepted.

C. After final vibrating/compaction there shall be no more than ¼ inch deviation from proposed grades.

D. Installation of concrete pavers in non-roadway areas shall be in accordance with the following.

D. Replacement of all underground utilities that are in conflict with paver installation.

E. The finished subbase shall be approved before placement of limerock base.

F. The limerock base course shall be compacted to 98% of maximum dry density as per AASHTO T-180.

G. The finished limerock base course shall be approved by the City or designee prior to placement of the sand leveling course.

H. The uncompacted sand leveling base shall be screened over the compacted limerock base to an uncompacted thickness of 1½ inches. The bedding course shall be treated with soil sterilizers to prohibit growth of grass and weeds.

I. The paver blocks shall be laid in the pattern approved by the City of Opa-Locka Public Works Department in accordance with the Standard Details.

J. Construct concrete header curb in accordance with the Standard Details.

E. Installation of concrete pavers in on roadways shall be in accordance with the following.

K. Replacement of all underground utilities that are in conflict with paver installation.

L. The finished subbase shall be approved before placement of the concrete slab.

M. The concrete pavers on the roadway shall be installed over a 6-inch-thick concrete base reinforced with galvanized steel wire mesh 6X6-W1.4xW1.4 with 1½ inches bedding between the concrete base and the concrete pavers.

N. The uncompacted sand leveling base shall be screened over the concrete base to an uncompacted thickness of 1½ inches. The bedding course shall be treated with soil sterilizers to prohibit growth of grass and weeds.

O. Construct concrete header curb in accordance with the Standard Details..

3.0.4. INSTALLATION OF TEXTURED PAVEMENT

A. Applying a patterned and/or textured treatment to asphalt or concrete, in accordance with manufacturer's recommendations. Applications include the following:

Imprinting patterns into existing or new pavement and covering with a surface coating(s) of paint or thermoplastic.

2. Imprinting patterns into existing or new pavement and inlaying the imprint with performed thermoplastic material.

3. Colored, preprinted, preformed texturized thermoplastic material that is applied over existing pavement.

4. Colored thermoplastic material that can be imprinted and texturized during or after application to existing pavement.

B. Patterns are defined as visible surface markings. Imprinted textures are defined as palpable surface markings.

C. Use the location, pattern/texture type (brick, stone, etc.) and coating color as specified in the Plans. Joint openings shall not exceed ½ inch in width.

D. Apply a patterned and/or textured treatment to asphalt or concrete in accordance with manufacturer's recommendations.

E. For application requiring removal and replacement of existing pavement, meet the requirements of Section 350 for cement concrete pavement; the requirements of Section 334 for Superpave asphalt or Section 337 for FC 9.5 and FC 12.5 asphalt.

F. Protect treated surfaces from traffic and environmental effect until the area is completely coated / imprinted and any coating have dried or cured according to the manufacturer's instructions. Complete all utility, traffic loop detector, and other items requiring a cut and installation under the finished surface, prior to pattern installation.

1.

For asphalt roadways, apply patterned/textured pavement a minimum of 14 days after placement of the adjacent pavement. Upon completion of the installation, the Engineer will check the area at random location for geometric accuracy, as specified in the plans. If any of the chosen areas have an imprint width and depth that is less than the manufacturer's specifications, correct the entire textured area, at no additional cost to the City. Supply the specified pattern and color sample for the Engineer's use to visually determine that the material matches the color specified in the plans. For any continuous or abutting areas, i.e. all treated areas of an intersection, color material must be from the same lot/batch. Provide certification that the textured pavement was installed in accordance with the manufacturer's requirements.

G. Textured pavement on crosswalks and travel lanes are to be tested for skid resistance in accordance with ASTM E303.

3.0.5. INSTALLATION OF SIDEWALK

A. Sidewalks at intersections and driveways shall be six (6) inches thick. Driveways shall include a 4-foot section at 2% maximum cross slope as per Standard Details and FDOT Index 522-03.

B. Sidewalks not at intersections or driveways shall be four (4) inches thick.

C. The concrete for sidewalk shall be 3,000 psi, with Miami-Dade County's sidewalk color standard match existing.

D. The concrete shall be reinforced with 6X6-W1.4xW1.4 welded steel wire mesh.

P. Wherever possible, sidewalks shall be designed with a minimum effective width of 6 feet on residential streets and 8 feet on collectors and arterials. Effective sidewalk widths shall be determined in accordance with the Miami Dade County Standard Details, firstly, and FDOT if not specified.

E. All wayfinding signage shall be installed in the back of the sidewalk wherever permitted by sight visibility, otherwise 4 feet minimum clear pedestrian path around sign shall be provided.

F. Repair of Concrete Sidewalk Surface Defects:

Q. Remove and replace all concrete surfaces that contain surface defects, which includes, but not limited to cracking, cracks which penetrate to reinforcement or completely through non-reinforced sections regardless of width, spalling, pop-outs, honeycomb, rock pockets and other objectionable and rough conditions and other objectionable conditions deemed unacceptable to the Engineer immediately after form removal. Test unformed surfaces sloped to drain for trueness of slope, in addition to smoothness.

R. Concrete rejected for any reason is to be removed and replaced, including labor, forms and reinforcing, to meet specifications at no additional cost to the City. Compounds for adhesion or as patching ingredients may be used, if approved by the City or designee. All repair of surface defects to be made require the approval of the City or designee, as to the method and procedure. Approval of the completed work must be obtained from the City or designee.

S. Remove existing sidewalk, or curb and gutter to either the nearest joint beyond or to where no remaining section is less than five (5) feet long.

3.0.6. INSTALLATION OF CURB RAMPS

A. It is the policy of the City of Opa-Locka Public Works Department to install truncated dome detectable warnings on the curb ramps, in compliance with the ADA Standards and PROWAG requirements for detectable warnings on walking surfaces and with FDOT standards. Curb ramps shall be directional and aligned with the crosswalk. Refer to the City of Opa-Locka Street Design Guidelines.

B. The installation of truncated domes on curb ramp shall be in compliance with the FDOT Index 522-002 and FDOT Specifications Section 527 and associated QPL. This Specification excludes stamped concrete detectable warnings due to poor performance.

C. The detectable warnings are required to have a dark-on-light or light-on-dark contrast with the surrounding concrete. Use Miami-Dade County' color standard on the detectable warning portion of the curb ramp. The color of the detectable warnings shall be integral with the device material.

D. Provide certification from an independent testing laboratory that the applied detectable warning device meets the above minimum requirements. Submit this certification for review and approval by the City or designee at least 10 days before the planned installation of any applied detectable warning device.

E. At least ten (10) days before the first installation of any applied detectable warning device, submit manufacture's installation recommendations and instructions for review and approval by the City or designee.

F. Special Considerations: 2 curb ramps per corner should always be used unless technically infeasible. US Access Board Public Rights-of-Way Access Advisory Committee strongly discourages single installations where possible because single ramps can:

    1. Misdirect blind pedestrians who use the slope of curb ramps as a cue.

    2. Increase crossing times for persons who use wheeled mobility aids and can place users into oncoming traffic at small radius corners where it is difficult to provide landing space at the bottom that is wholly within marked crossings.

    3. Drivers may not be as alert to persons crossing at the apex of a corner.

G. If a single diagonal curb ramp is installed because of technical infeasibility, a 48 inches clear space wholly contained within the crosswalk must be provided at the bottom of the curb ramp to allow wheelchair users enough room to maneuver off of the ramp and into the crosswalk

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This section includes minimum construction requirements for precast concrete flared end sections. The sections shall be constructed in accordance with FDOT specifications and Standard Details, and in conformity with the Plans.

1.0.2. PRECAST PRESTRESSED CONCRETE CONSTRUCTION

A. Fabricate, store, transport and erect precast/prestressed concrete members prestressed by the pretensioning method. Pretensioned precast prestressed concrete products are products prestressed by the pretensioning method. In this method, steel or fiber reinforced polymer (FRP) components are stressed and anchored; the concrete for the product is then cast and cured, and finally the stress in the steel or FRP components is released from the anchorages to the concrete through bond, after the concrete has attained its specified release strength.

B. A precast prestressed concrete plant, hereinafter called plant, is an independent operating facility capable of performing all the operations necessary to fabricate precast/prestressed concrete products.

1.0.3. QUALITY ASSURANCE

A. The Engineer will perform periodic inspections, sampling, and testing to ensure of the quality and acceptability of the materials, methods, techniques, procedures and processes being utilized in the fabrication of precast prestressed concrete products.

1.0.4. RELATED SECTIONS

Section 03400 - PRECAST PRESTRESSED CONCRETE

PART 2 – PRODUCTS

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

PART 3 – EXECUTION

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

END OF SECTION

City of Opa-Locka Sesame th St. & Atlantic AveStreet Culvert Replacement Between NW 135

02630 OUTFALL ENDWALL

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. This section includes minimum construction requirements for precast concrete headwalls. The endwalls shall be constructed in accordance with FDOT specifications and Standard Details, and in conformity with the Plans.

1.0.2. PRECAST PRESTRESSED CONCRETE CONSTRUCTION

A. Fabricate, store, transport and erect precast/prestressed concrete members prestressed by the pretensioning method. Pretensioned precast prestressed concrete products are products prestressed by the pretensioning method. In this method, steel or fiber reinforced polymer (FRP) components are stressed and anchored; the concrete for the product is then cast and cured, and finally the stress in the steel or FRP components is released from the anchorages to the concrete through bond, after the concrete has attained its specified release strength.

B. A precast prestressed concrete plant, hereinafter called plant, is an independent operating facility capable of performing all the operations necessary to fabricate precast/prestressed concrete products.

1.0.3. QUALITY ASSURANCE

A. The Engineer will perform periodic inspections, sampling, and testing to ensure of the quality and acceptability of the materials, methods, techniques, procedures and processes being utilized in the fabrication of precast prestressed concrete products.

1.0.4. RELATED SECTIONS

Section 03400 - PRECAST PRESTRESSED CONCRETE

PART 2 – PRODUCTS

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

PART 3 – EXECUTION

Refer to section 03400 - PRECAST PRESTRESSED CONCRETE

END OF SECTION

02641 PIPE CULVERTS

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

A. Materials and installation for pipe culverts with Aluminized Steel Type 2 ULTRA FLO (UF) corrugated steel pipe by Contech Engineered Solutions or approved equal.

1.0.2. RELATED WORK

A. Section 02222 “Excavation – General”

B. Section 02230 “Clearing and Grubbing”.

C. Section 02314 “Excavation, Backfill and Fill for Structural Facility and Utility Systems”.

PART 2 – PRODUCTS

2.0.1. TYPE OF PIPE TO BE USED

A. When the Plans designate a type (or types) of pipe, use only the type (or choose from the types) designated.

B. When metal pipe is allowed and no future maintenance concerns exist, the Contractor may propose the pipe gage based on the FDOT’s Drainage Manual and Culvert Service Life Estimator for approval by the Engineer. When extending existing pipes, construct the pipe extensions of the same size and kind as the existing pipe. Extensions of existing pipes, whose materials are no longer produced, shall be extended with the most similar pipe material available.

C. The Aluminized Steel Type 2 coils shall conform to the applicable requirements of AASHTO M 274 or ASTM A929.

2.0.2. COUPLING BANDS

A. Coupling bands for the UF shall be made of the same base metal and coatings as the UF to a minimum of 18 gauge.

B. Ends of the UF are rerolled with annular corrugations for proper indexing.

C. Connection fasteners will be provided with by the manufacturer.

PART 3 – EXECUTION

3.0.1. LAYING PIPE

A. Lay all pipe, true to the lines and grades given, with bells upgrade and spigot end fully entered into the bell. When pipe with quadrant reinforcement or circular pipe with elliptical reinforcement is used, install the pipe in a position such that the manufacturer's marks designating "top" and "bottom" of the pipe are not more than five degrees from the vertical plane through the longitudinal axis of the pipe. Do not allow departure from and return to plan alignment and grade to exceed 1/16 inch per foot of nominal pipe length, with a total of not more than 1 inch departure from theoretical line and grade. Take up and relay any pipe that is not in true alignment or which shows any settlement after laying at no additional expense to the City.

B. Do not use concrete pipe with lift holes except round pipe which has an inside diameter in excess of 54 inches or any elliptical pipe.

C. Repair lift holes, if present, with hand-placed, stiff, non-shrink, 1-to-1 mortar of cement and fine sand, after first washing out the hole with water. Completely fill the void created by the lift hole with mortar. Cover the repaired area with a 24 inch by 24 inch piece of filter fabric secured to the pipe.

D. Follow the manufacturer's instructions, to secure the filter fabric to the pipe, until the backfill is placed and compacted.

E. Do not cut or drill into or through the corrugations or ribs of plastic pipe except when necessary to meet the dimensional requirements shown in the Plans.

F. When installing pipes in structures, construct inlet and outlet pipes of the same size and kind as the connecting pipe shown in the Plans. Use the same pipe material within each continuous run of pipe. Extend the pipes through the walls for a distance beyond the outside surface sufficient for the intended connections, and construct the concrete around them neatly to prevent leakage along their outer surface as shown on FDOT's Standard Plans, Index 425-001. Keep the inlet and outlet pipes flush with the inside of the wall. Resilient connectors as specified in 942-3 may be used in lieu of a masonry seal.

G. Furnish and install a filter fabric jacket around all pipe joints and the joint between the pipe and the structure in accordance with Standard Plans, Indexes 425-001 and 430- 001. Use fabric meeting the physical requirements of Type D-3 specified in Section 985. Extend the fabric a minimum of 12 inches beyond each side of the joint or both edges of the coupling band, if a coupling band is used. The fabric must have a minimum width of 24 inches, and a length sufficient to provide a minimum overlap of 24 inches. Secure the filter fabric jacket

against the outside of the pipe by metal or plastic strapping or by other methods approved by the Engineer.

H. When rubber gaskets are to be installed in the pipe joint, the gasket must be the sole element relied on to maintain a tight joint. Soil tight joints must be watertight to 2 psi. Water-tight joints must be water-tight to 5 psi unless a higher pressure rating is required in the Plans.

I. When laying pipes that pass through mechanically stabilized earth (MSE) reinforced fill, connect the portion of the pipe within the wall to the external portion of the pipe run only after the full height of the wall supported embankment is in place.

J. When Wall Zone Pipes are shown in the Plans, meet the following requirements:

1. Use resilient connectors on pipes entering and leaving drainage structures.
2. Provide a 2 to 4 inch pipe overhang beyond the drainage structure internal walls.
3. For pipes without welded joints, meet the following additional requirements:
   3.1 Pipe joints must be watertight to 10.8 psi when pulled out 2 inches from the fully homed position in both straight alignment and 5% deflection.
   3.2 Do not allow the gap between sections of pipe to exceed 5/8 inch for all pipe diameters.

3.0.2. TRENCH EXCAVATION

C. Excavate the trench for storm and cross drains, and side drains as specified in sections 02222 “Excavations – General” , Section 02230 “Clearing and Grubbing” and Section 02314 “Excavation, Backfill and Fill for Structural Facility and Utility Systems”.

3.0.3. FOUNDATION

A. Provide a suitable foundation, where the foundation material is of inadequate supporting value, as determined by the Engineer. Remove the unsuitable material and replace it with suitable material, as specified in section 02314 “Excavation, Backfill and Fill for Structural Facility and Utility Systems”.. Where in the Engineer’s opinion, the removal and replacement of unsuitable material is not practicable, he may direct alternates in the design of the pipeline, as required to provide adequate support. Minor changes in the grade or alignment will not be considered as an adequate basis for extra compensation.

B. Do not lay pipe on blocks or timbers, or on other unyielding material, except where the use of such devices is called for in the Plans.

3.0.4. BACKFILLING

A. Backfill around the pipe as specified in section 02314 “Excavation, Backfill and Fill for Structural Facility and Utility Systems” unless specific backfilling procedures are described in the Contract Documents.

3.0.5. PLUGGING PIPE

A. When existing pipe culverts are to be permanently placed out of service, fill them with flowable fill that is non-excavatable, contains a minimum 350 pounds per cubic yard of cementitious material. Install masonry plugs that are a minimum of 8 inches in thickness, in accordance with FDOT’s Standard Plans, Index 430-001.

B. When proposed or existing pipe culverts are to be temporarily placed out of service, plug them with prefabricated plugs as shown in the Plans. Install prefabricated plugs in accordance with the manufacturer’s recommendations. Do not fill or construct masonry plugs in any pipe culvert intended for current or future service.

3.0.6. GRATES

A. Use metal gratings that meet the requirements of 962-8 of FDOT’s Standard Specifications Manual.

3.0.7. END TREATMENT

A. Place an end treatment at each storm and cross drain, and side drain as shown in the Plans. Sod around end treatments in accordance with FDOT’S Standard Plans, Index 570-001.

3.0.8. TYPE CONCRETE ENDWALLS

A. Construct in accordance with the Plans and Standards Plans.

3.0.9. REMOVING EXISTING PIPE

A. If the Plans indicate that existing pipe is to remain the property of the Department, collect and stack along the right-of-way all existing pipe or pipe arch so indicated in the Plans to be removed, or that does not conform to the lines and grades of the proposed work and that is not to be re-laid, as directed by the Engineer. Take care to prevent damage to salvageable pipe during removal and stacking operations.

3.0.10. SPECIFIC REQUIREMENTS FOR CORRUGATED METAL PIPE

A. Make a field joint with locking bands, as specified in Article 9 of AASHTO M36 and AASHTO M196M for aluminum pipe. For aluminum pipe, fabricate bands from the same alloy as the culvert sheeting.

B. When corrugated metal pipe is used as side drain, storm and cross drain, or gutter drain, use a rubber or neoprene gasket of a design shown to provide a joint. Use a gasket of one of the following dimensions:

    1. For annular joints with 1/2 inch depth corrugation: either a single gasket a minimum of 7 inches by 3/8 inch or two gaskets a minimum of 3-1/2 inches by 3/8 inch; and for annular joints with 1 inch depth corrugations: either a single gasket a minimum of 7 inches by 7/8 inch or two gaskets a minimum of 3-1/2 inches by 7/8 inch.

    2. For helical joints with 1/2 inch depth corrugation: either a single gasket a minimum of 5 inches by 1 inch or two gaskets a minimum of 3-1/2 inches by 1 inch; and for helical joints with 1 inch depth corrugations: either a single gasket a minimum of 5 inches by 1-1/2 inches or two gaskets a minimum of 3-1/2 inches by 1-1/2 inches.

    3. Such other gasket designs as may be approved by the Engineer.

C. If, in lieu of a single gasket spanning the joint, two gaskets are used, place these individual gaskets approximately 2 inches from each pipe end at the joint. When two gaskets are used, seal the overlapping area on the coupling band between the gaskets consistent with the joint performance specified. The Contractor may tuck a strip of preformed gasket material over the bottom lip of the band for this purpose. Use coupling bands that provide a minimum circumferential overlap of 3 inches. As the end connections on the coupling band are tightened, ensure that there is no local bending of the band or the connection. Use precurved coupling bands on pipe diameters of 24 inches or less.

D. Use flat gaskets meeting the requirements of ASTM D1056, designation 2C2 or 2B3. In placing flat gaskets on pipe prior to placing the coupling band, do not stretch the gasket more than 15% of its original circumference. Use circular gaskets meeting the requirements of ASTM C361. Do not stretch the circular gasket more than 20% of its original circumference in placing the gasket on pipe.

E. Apply an approved vegetable soap lubricant.

F. In lieu of the above-specified combination of locking bands and flat gaskets, the Contractor may make field joints for these pipe installations by the following combinations:

    1. Use the metal bands as specified in Article 9 of AASHTO M36M that are at least 10-1/2 inches wide and consist of a flat central section with a

corrugated section near each end, designed to match the annular corrugation in the pipe with which they are to be used. Connect the bands in a manner approved by the Engineer, with a suitable fastening device such as the use of two galvanized 1/2-inch diameter bolts through a galvanized bar and galvanized strap, suitably welded to the band. Use a strap that is the same gage as the band. Where helically corrugated pipe is to be jointed by this alternate combination, ensure that at least the last two corrugations of each pipe section are annular, and designed such that the band will engage each pipe end with the next-to-outside annular corrugation.

2. For these bands, use a rubber gasket with a circular cross-section of the "O-ring" type conforming to ASTM C361. Use gaskets having the following cross-sectional diameter for the given size of pipe:

Pipe Size	Gasket Diameter
12 inches through 36 inches (with 1/2-inch depth corrugations)	13/16 inch
42 inches through 96 inches (with 1/2-inch depth corrugations)	7/8 inch
36 inches through 120 inches (with 1 inch depth corrugations)	1-3/8 inches

3. Use channel band couplers in helical pipe with ends which have been reformed and flanged specifically to receive these bands. Use channel band couplers that are of a two-piece design, are fabricated from galvanized steel stock conforming to AASHTO M36, have 2 inch by 2 inch by 3/16 inch angles fastened to the band ends to allow for proper tightening, and meet the following:

Band Thickness	Pipe Wall Thickness
0.079 inch	0.109 inch or lighter
0.109 inch	0.138 inch or heavier
3/4 inch wide	0.109 inch or lighter
One inch wide	0.138 inch or heavier

G. Furnish two 1/2-inch diameter connection bolts with each band, that conform to ASTM A307, Grade A and are electroplated in accordance with ASTM B633.

H. Use a gasket with the joint that is a hydrocarbon blend of butyl rubber meeting the chemical composition and physical properties of 942-2.2. Use a 3/8 by 3/4-inch gasket for pipe fabricated from 0.109 inch or lighter material and a 3/8 by 1 inch gasket for pipe fabricated from 0.138 inch and heavier material.

I. The Contractor may use a flange band coupler without the gasket for all applications other than side drain, storm and cross drain, and gutter drain.

J. Do not use the flange band coupler to join dissimilar types of pipes.

K. The Contractor may join reformed flanged helical pipe to existing annular or reformed pipe having annular ends. On non-gasketed installations, use either an annular band or an alternate joint. On gasketed installations, use an annular band, minimum of five corrugations in width, in conjunction with two O-ring gaskets. Use mastic material to seal the area of band overlap.

L. Install pipe using either a trench or open ditch procedure.

M. Check pipe shape regularly during backfilling to verify acceptability of the construction method used. Pipe deflected 5% or more of the certified actual mean diameter of the pipe at final inspection shall be replaced at no cost to the City. Deflection measurements are taken at the point of smallest diameter on the corrugations.

END OF SECTION

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. Work included under this Section covers the furnishing of all labor, equipment and material required for cutting, removing, protecting, constructing, replacing or stabilizing all existing roadways, driveways and pavements of the various types encountered, removed or damaged under this Contract.

B. In addition, all existing utility castings, including valves boxes, junction boxes, handholes, pull boxes, inlets and similar structures in the areas of trench restoration, pavement replacement and pavement overlay shall be adjusted by the Contractor to bring them flush with the surface of the finished work.

1.0.2. QUALITY CONTROL

A. The phrase “FDOT Specifications” shall refer to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. The FDOT Specifications, are referred to herein and are hereby made a part of this Contract to the extent of such references, and shall be as binding upon the Contract as through reproduced herein in their entirety.

1.0.3. DAMAGE BY CONTRACTOR

A. The Contractor shall be responsible for the protection from damage from his construction operations, all pavements, including all base courses and surface courses, within the work area.

B. Payment for pavement restoration will be made only where such base courses or surface courses are encountered within the limits defined in the pavement repair details shown on the Plans and/or in the City Standard Details at the rear of the Specifications.

C. Any base course or surface course beyond those limits, damaged as a result of the Contractor's operation, shall be restored in accordance with the applicable requirements of these specifications, to the satisfaction of the City, and to the satisfaction of the governing authority having jurisdiction over the work area.

D. Any damage to adjacent lanes of pavement will require the Contractor to resurface the entire lane width for a length, as approved by the City. When the damage amounts to 25 percent or more in any one block (approximately 600 feet), the Contractor shall resurface the entire width of the lane in which the damage occurred for the entire block.

E. The Contractor is hereby notified that wherever the line for repaving for trenches extends one foot into the edge of the existing paving, he shall repave to this edge only. Full lane paving will not be required. Damage to the pavement beyond this line by the Contractor will require that he repave the full width.

F. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the City.

G. No payment shall be made for pavement restoration which falls outside the above described limits and is required for thrust blocks and other appurtenant items. The cost for such work shall be included in the price bid for the applicable item.

H. It is brought to the Contractor's attention that wherever the line of the nominal repaving for trenches extend to within two (2) feet of the edge of the existing paving, he shall repave to this edge.

PART 2 – PRODUCTS 2.0.1.

MATERIALS – GENERAL

A. Lime rock Base shall be as specified in Section 02526 “Concrete Pavement, Curb and Walkways”.

B. Asphaltic Pavement, Prime Coat and Tack Coat shall be as specified Section 02750 “Asphaltic Concrete Pavement”.

C. Sand cover material shall be clean and non-plastic, and shall be composed of hard durable grains, free from loam, silt rock particles and shall not contain any sticks, vegetation, grass, roots or organic matter. Local sand meeting such requirements may be used. Sand shall be subject to approval by the City.

D. 1:10 Mix: Sand-cement mix for backfill within state roads shall be a 1:10 mix of Type I or II Portland Cement and Sand that shall produce a slump of 4 to 6 inches.

2.0.2. BITUMINOUS PAVING MATERIAL

Asphalt cement for asphaltic concrete mixes shall be Viscosity Grade AC-20 or AC-30, homogeneous, free from water and shall meet the requirements of FDOT Specifications, Section 916-1. Unless otherwise specified, all test samples required shall be supplied by

the Contractor. For friction courses, in addition to meeting the above requirements, the bituminous material shall contain 0.5% of a heat-stable, anti-stripping additive from an approved source.

A. Asphaltic Concrete - Type S-I Mix shall meet the requirements of FDOT Specifications for Type S-I Asphaltic Concrete, Sections 330, 331 and 916 of FDOT Specifications.

B. Asphaltic Concrete - Type I Mix shall meet the requirements of Miami-Dade County Public Works Department Specifications for Type I Asphaltic Concrete Surface Course, Section 133 of the Public Works Manual.

C. Asphaltic Concrete - Type III Mix for asphaltic concrete wearing surface overlay, both machine laid and standard (skin patch), shall meet the requirements of FDOT Specifications for Type III Asphaltic Concrete, Section 333-1 through Section 333-6.

D. Type V paving repairs shall consist of a machine-laid asphaltic concrete wearing surface overlay, which shall be a nominal one-inch thick asphaltic concrete, meeting the material requirements of Type I repairs. See subsection 3.07, below.

E. Asphaltic Concrete - Type FC-1, FC-2, FC-3 and FC-4 shall meet the requirements of D.O.T Specifications for Friction Courses, Sections 337-1 through Section 337-7.

F. Emulsified Asphalt for Slurry Seal Coat shall be of the slow-setting, mixing type and shall be homogeneous, meeting the requirements of the Asphalt Institute, Grade SS1 or SS-1h.

G. Liquid Asphalt for Prime and Tack Coat: See Section 02741.

H. Liquid Asphalt for Sand and Asphalt Paving shall be asphalt cement, viscosity Grade AC-5 or emulsified asphalt, Grade RS-2 (anionic) conforming to the requirements of FDOT Specifications, Section 916-1 and 916-4, respectively.

I. Mineral Aggregate for Slurry Seal Coat shall consist of screened sand or limestone screenings or gray granite screenings or a mixture of sand and screenings plus not less than 3%, by weight, of Type I or Type II Portland cement.

PART 3 – EXECUTION

3.0.1. INSTALLATION – GENERAL

A. Permanent pavement repair shall be in accordance with the details shown in the Standard Details herein, with edges straight and parallel and patches rectangular in plan. Replace any paving, beyond the limits shown in the details and as called for in the specifications, as required. Where trenches are located out of the existing

pavement and damage occurs to the pavement, that pavement shall also be replaced by the Contractor.

B. Pavement markings removed or obliterated by the Contractor's operations shall be promptly replaced, in kind, to the satisfaction of the City of Opa-Locka Public Works Department.

C. All equipment necessary for construction shall be on the job site in first class working condition. Spilling or dropping of petroleum products is prohibited and all defective equipment shall be removed or replaced immediately. The Contractor shall be subject to all DERM (Department of Environmental Resources Management) regulations and clean up requirements.

D. The percentages of maximum density for subgrade and lime rock base specified herein are minimum. Greater percentages of maximum density shall be obtained, if so required, by the governing authority having jurisdiction over the work location.

E. Asphaltic concrete mixtures shall be obtained only from plants which comply with the requirements of FDOT Specifications, Section 320 as applicable, using materials specified herein, and producing the specified mixture. General construction requirements for all hot bituminous mixtures specified herein shall conform to FDOT Specifications, Section 330, as applicable.

I. Asphaltic concrete shall be laid only where the surface to be covered is intact, firm, cured and dry, and only when weather conditions are suitable. The temperature of the mixture at the time of spreading shall be within 25°F of the temperature set by the Engineer. No mixture shall be spread when the air temperature is less than 40°F nor when the spreading cannot be finished and compacted during daylight hours.

F. Any mixture caught in transit by a sudden rain may be laid at the Contractor's risk, if the base is in suitable condition. Under no circumstances shall asphaltic material be placed while rain is falling, or when there is water on the area to be paved.

G. Subgrade: Roadway subgrades shall be stabilized to the minimum depth shown on the drawings to a Lime rock Bearing Ratio of not less than 40. Stabilizing shall be Type B as defined in Section 160 of the FDOT Specifications. Stabilization may require the addition and thorough mixing in of crushed lime rock, course lime rock screenings, or any other stabilizing material acceptable to the City. The stabilizing material shall be applied in such quantity that, after mixing and blending, the subgrade will have a LBR of not less than 40. Stabilizing material shall be mixed or blended in the subgrade material by plowing, scarifying, disking, harrowing, blading and mixing with rotary tillers until the mixed materials are of uniform bearing value throughout the width and depth of the layer being processed.

H. At least three density determinations shall be made on each day's final compaction operations on each course, and the density determinations shall be made at more frequent intervals if deemed necessary by the City.

I. Lime rock Base: The lime rock base shall be constructed in accordance with Sections 200 and 911 of the FDOT Specifications, to the thickness and width indicated on the drawings.

J. After spreading of the base material is completed, the entire surface shall be scarified and shaped so as to produce the exact grade and cross section after compaction. For double course base, this scarifying shall extend a depth sufficient to penetrate slightly the surface of the first course. The maximum depth of each lift shall be 8-inches.

K. When the material does not have the proper moisture content to ensure the required density, wetting or drying shall be required. If the material is deficient in moisture, water will be added and uniformly mixed in by disking the base course to its full depth. If the material contains an excess of moisture, it shall be allowed to dry before being compacted. As soon as proper conditions of moisture are attained, the material shall be compacted to an average density not less than 98 percent maximum density as determined in more than one course, the density shall be obtained in each lift of the base.

L. During final compacting operations, if blading of any areas is necessary to obtain the true grade and cross section, the compacting operations for such areas shall be completed prior to making the density determination on the finished base.

M. Unless otherwise directed by the Engineer of Record, the surface shall be "hardplaned" with a blade grader immediately prior to the application of the prime coat to remove the thin glaze or cemented surface and to allow free penetration of the prime material. The materials planed from the base shall be removed from the base area.

N. If cracks or checks appear in the base, either before or after priming, which in the opinion of the City, would impair the structural efficiency of the base course, the Contractor shall remove such cracks or checks by rescarifying, reshaping, adding base material where necessary and recompacting.

O. Mixing Base and Subgrade: If at any time the subgrade material shall become mixed with the base course material, the Contractor shall, without additional compensation, dig out and remove the mixture, reshape and compact the subgrade and replace the materials removed with clean base material, which shall be shaped and compacted as specified above.

P. Asphaltic Concrete: The spreading, compacting and jointing the wearing surface shall be in accordance with Sections 330 and 331 of the FDOT Specifications to the thickness indicated on the drawings.

3.0.2. TEMPORARY PAVING

A. Prior to commencing excavation, the asphalt surface shall be saw-cut within the limits of the allowable trench width. Temporary paving will be required along the entire route where the original paved surface is removed. Unless otherwise approved by the City, temporary paving shall be placed the same day the trench is backfilled. The trench shall be backfilled up to a level 1 inch below the existing pavement surface and a temporary, cold mixed sand/asphalt pavement shall be constructed up to the level of the existing pavement surface. The liquid asphalt shall be Grade RC-70, conforming to the requirements of FDOT Specifications, Section 916-2. The sand shall conform to the requirements of FDOT Specifications, Section 902.3 for fine aggregate.

B. The cold mix is to be installed one block at a time, not crossing any intersection, or a maximum of 1,200 feet shall be completed before the Contractor may move forward with his excavation work. Backfill, compaction and temporary paving is to keep pace with the pipe installation. Written permission must be obtained from the City permitting the work to allow greater lengths than 1,200 feet. Permitting agencies may reduce the allowable limits in their permit, or for other unforeseen right-of-way conditions.

C. Prior to completion of the work and within a maximum of 30 calendar days, the Contractor shall remove the 1 inch of cold mix and surplus backfill. The Contractor shall replace it with the specified compacted lime rock base course and asphaltic within the specified working limits. Municipal agencies permitting this work may accelerate the time for removal of the cold mix, at their discretion.

D. The temporary pavement shall be maintained by the Contractor in a condition satisfactory to the City until its removal. Removal shall include any surplus backfill material. Replacement of the temporary pavement with permanent pavement shall be made within 30 days. In replacing the temporary paving with permanent pavement, all work shall be completed in sections compatible with specified traffic maintenance procedures.

E. The Contractor may elect to install a suitable temporary hot mix asphaltic pavement, to be left in-place, in lieu of cold mix, when the hot mix asphalt is left in-place and installed over properly compacted lime rock base course. This temporary pavement shall be incorporated into the specified permanent pavement restoration as part of Type I paving restoration.

F. Sand seal on the lime rock base course will not be permitted in lieu of temporary paving.

G. Unless otherwise approved by the City, temporary paving, shall be placed within twenty-four hours following the completion of backfilling.

3.0.3. TYPE I PAVING REPAIR (LIMEROCK BASE - ASPHALTIC CONCRETE SURFACE)

A. Type I paving repairs shall be made with an 8-inch thick compacted lime rock base and a minimum 1-inch thick asphaltic concrete surface, as detailed in the Standard Details. On Public Works roads asphaltic concrete shall have a compacted thickness of 2-inch, placed in a minimum of two (2) compacted 1-inch lifts.

B. Limerock for pavement base shall be Miami limerock obtained from local sources where the overburden was removed from the pits prior to mining operations. The limerock shall comply with the requirements of FDOT Specifications, Section 911.

C. The backfill previously placed and compacted shall be excavated to the required depth below the existing road surface and the existing paving shall be cut back beyond all excavations, using an abrasive disc saw to trim the edges to straight and true lines, minimum width for the lime rock base shall be equal to the trench width plus 2 feet. Eight inches of lime rock base shall be placed in two layers, each layer compacted to not less than ninety-eight percent (98%) density in accordance with Section 200 of FDOT Specifications. During rolling, the base shall be wetted down, as necessary, to secure the greatest possible compaction. After rolling, the entire surface of the base shall be thoroughly scarified to a depth of not less than 3 inches and shaped to conform to and be parallel with the existing surface, then watered and rolled again. Rolling and watering shall continue until the entire depth of the base is bonded and compacted into an unyielding mass.

D. If at any time the subgrade material becomes mixed with the lime rock base course materials, the Contractor shall, without additional compensation, dig out and remove the mixture, reshape and compact the subgrade and replace the materials removed with clean rock which shall be watered and rolled until satisfactorily compacted.

E. After the lime rock base course has been properly prepared and is dry and ready to receive the wearing surface, a tack coat of emulsified asphalt, in accordance with Section 02741, shall be applied at a rate of 0.10 gallon per square yard, immediately followed by the asphaltic concrete. The tack coat shall be applied to the entire lime rock base uniformly, and shall thoroughly coat all surfaced. Care shall be taken to tack coat and bond the edge of surrounding pavement.

F. The asphaltic concrete shall be plant mixed, using the best grade of local aggregates of approved size and gradation and mixed with an approved binder and conforming the either the State of Florida Department of Transportation Specifications, Type S-1 Asphaltic Concrete, Sections 330, 331 and 916 of FDOT Specifications, or Miami Dade County Public Works Type I, as ordered by the Engineer of Record.

G. Where the width of the repair permits, the asphaltic concrete plant mix material shall be placed by means of an approved mechanical spreader and finisher. The mixture shall be compacted to true grade and cross section by means of a tandem roller weighing not less than eight tons. The compacted asphaltic concrete mixture shall not be, in any case, less than one inch in thickness. Rolling shall proceed as closely behind the spreader as possible and all material shall be completely compacted the same day it is placed. The minimum width of the wearing surface shall be the same as the base.

3.0.4. TYPE IV PAVING REPAIRS (CONCRETE SLAB – RIGID PAVEMENT)

A. Type IV repairs will be used when the restoration work falls within the limits of existing rigid pavement.

B. Paving repairs shall be similar to Type III paving repairs except that No. 4 reinforcing steel bars spaced 12 inches on centers both ways shall be substituted for the mesh reinforcement, and the slab shall be 8 inches thick instead of 6 inches, with the top of the concrete matching the elevation and finish of the existing pavement. The asphaltic concrete surface course is not required.

3.0.5. TYPE V PAVING REPAIRS (ASPHALTIC CONCRETE WEARING SURFACE OVERLAY)

A. Type V paving repairs shall be made where noted on the plans and/or as ordered by the Engineer or Record. Type V paving repairs shall consist of a machine-laid asphaltic concrete wearing surface overlay, which shall be a nominal one-inch thick asphaltic concrete, meeting the material requirements of Type I repairs, as specified hereinabove. As used herein, "overlay" shall mean Type V paving repairs. A special wearing surface may be substituted, if required.

B. In general, the overlay shall be applied in a full lane width or widths, after the permanent paving repairs over the trench have been made. Type V is usually in addition to required Type I repairs. Since the quantity of Type V repairs that may be required is usually unknown until pavement restoration work begins, Type V repairs may be established in the Proposal on a contingent basis.

C. All longitudinal and transverse asphalt replacement overlay wearing surfaces shall butt into adjacent existing asphalt wearing surfaces in full lane asphaltic pavement restoration. The finish elevation of the new full lane overlay shall meet existing elevations adjacent to the new work.

D. The existing asphaltic concrete surface shall be saw cut for its full depth or 1-inch minimum, and then stripped back for at least 2 feet into the area to be overlaid to a second cut which shall also be in clean straight lines. The second, or interior, cut edge shall be rolled with a tandem roller weighing not less than 8 tons before the overlay is applied. The stripped area shall be used to provide a smooth transition or "feather"

area between the overlay and the existing pavement. Before placing the overlay, all cut edges and the surface of the stripped area shall be tack coated with emulsified asphalt as specified herein below.

E. If the Contractor requests in writing to "feather" the longitudinal edge, and if written permission is granted to "feather" the asphalt by the City a sanded mix of 70-30 type shall be used. "Feathering" shall begin 18 inches from the tapered edge.

F. Prior to installing a full lane width overlay over existing asphaltic pavement the trench and shoulders over the pipe shall be sawcut and filled with asphaltic concrete to the required depth, terminating flush with the existing adjacent asphalt in accordance with the municipality having jurisdiction over the work for Types I, II or M. Type V overlay will be installed as detailed above.

G. When a minor amount of asphalt surface will remain, generally with large pipe installations, after the pipe has been installed and the required longitudinal saw cutting of the asphaltic pavement completed, the Contractor may request permission to remove all the asphalt in the lane, by saw cutting the asphalt adjacent to the existing lane, then placing the Type V overlay flush with the adjacent asphalt. This would require that the Type I, II or M finish elevation be lowered 1 inch to allow for the Type V overlay.

H. Before the overlay is applied, existing surfaces shall be swept clean of all dirt and debris, using a power driven broom if warranted by the size of the location to be overlaid and/or as ordered by the City. Pavement edges shall be cleared of all encroaching vegetation, loose sand, rock and all other foreign matter. When the existing surface is thoroughly clean, a tack coat of Emulsified Asphalt Grade RS-2 (anionic) shall be applied at the rate of approximately 0.10 gallon per square yard, immediately followed by the asphaltic concrete overlay.

I. Machine-laid overlay shall be placed by means of an approved mechanical spreader and finisher, and the mixture shall be compacted to true grade and cross section by means of a tandem roller weighing not less than 8 tons.

J. The compacted overlay shall be thicker as required to produce a smooth uniform surface free of any irregularities but shall not be less than one inch in thickness. Existing depressed areas in the asphaltic pavement, which could collect water after a rainfall shall be corrected before placing the asphaltic overlay. Rolling shall proceed as close behind the spreading of the asphaltic overlay as possible, and all materials shall be completely compacted the same day it is placed.

3.0.6. SLURRY SEAL COAT

A. Slurry-seal repairs shall be made where ordered by the Engineer of Record or the City.

B. Before any material is laid, the existing surface shall be cleaned with brooms or power blowers. Vegetation which has overgrown the edges shall be removed. All cracks, potholes and depressions shall be brought up to grade with bituminous concrete skin patching.

C. A tack coat, if required, shall consist of emulsified asphalt SS-1h, diluted with 3 parts of water, sprayed and squeegeed or broomed at a rate of 0.1 to 0.2 gallons per square yard.

D. A minimum thickness of 1/8-inch to a maximum of 1/4-inch of slurry mix shall be spread by a drag distributor at a maximum rate of 180 feet per minute. Any ridges or surplus material shall be smoothed by hand squeegee. The pavement shall be kept damp with a fog spray just ahead of the machine.

E. A second coat shall not be applied to, nor traffic permitted to drive upon, the first application until it has thoroughly dried. (A dry condition is such that an automobile tire track does not show after driving on the surface).

3.0.7. ASPHALT COLD MILLING

A. Cold milling of the existing pavement for a 1-inch depth shall be done by using an automated pavement planer capable of maintaining an accurate depth. Cold milling equipment shall meet the approval of the Engineer and the governing agency having jurisdiction at the location of the pavement milling operation. The Engineer's word as to the acceptability of the equipment shall be final

B. After the pavement has been milled and the existing pavement removed, a tack coat shall be applied as specified above.

C. The required width of 1-inch thick asphaltic concrete wearing surface of the specified wearing course shall be applied in accordance with the above specifications.

D. The Contractor shall perform asphalt cold milling where called for on the plans or as required for a complete installation, when approved or requested by the City. Cold milling shall be done using an automated pavement planer capable of maintaining an accurate depth. Cold milling equipment shall meet the approval of the City and governing agency having jurisdiction at the location of the pavement milling operation. All charges for maintenance of traffic, transportation of personnel, equipment and other mobilization charges shall be considered as incidental to the cold milling operation.

E. Cold asphalt milling shall be provided to improve the rideability of the finished pavement, lower the finished grade adjacent to an existing curb prior to resurfacing or to completely remove existing pavement. The overall length of the milling machine (excluding the conveyor) shall be a minimum of 18 feet, and having a minimum cutting

width of six feet. The milling operation shall be operated to effectively minimize the amount of dust being emitted from the machine. Prewetting of the pavement may be required. In areas where milling is to be performed around the City utility structures such as manholes, valve boxes etc., proper caution shall be taken as not to damage any of the structures. Saw-cutting of the concrete surrounding the structure and using a pick or other means so as not to disturb the structure shall be employed to prevent any damage. Prior to opening an area which has been milled to traffic, the pavement shall be thoroughly swept with a power broom or other approved equipment to remove to the greatest extent practicable, the fine material which will dust under traffic. This operation shall be conducted in a manner so as to minimize the potential for creating a traffic hazard and to minimize air pollution.

F. The milling operation shall be continuous so as to complete each site without any delays. All milling operations shall be coordinated by the City Inspector.

G. Traffic maintenance charges shall include the installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Dade County Public Works Manual. In addition, the Contractor shall provide all barricades, flashing warning lights and/or arrow boards necessary to maintain safety and warn motorists of the construction.

3.0.8. REPAIR OF DAMAGED PAVEMENT

A. All damage to pavement by the Contractor as a result of Work under this project shall comply with "DAMAGE BY CONTRACTOR", above, and shall be repaired in a manner satisfactory to the City. The repair shall include the preparation of the subgrade, the placing and compacting of the lime rock base, the priming of the base, the placing and maintaining of the surface treatment, all as specified herein.

B. The width of all repairs within the work area shall extend at least 12 inches beyond the limit of the damage. The edge of the pavement to be left in place shall be cut to a true edge with a saw or other acceptable method so as to provide a clean edge to abut the repair. The line of the repair shall be uniform with no irregularities. Repair of damage by the Contractor beyond the work area shall be approved by the governing agencies having jurisdiction over the work prior to commencing the work.

3.0.9. CONCRETE PAVEMENT REPAIR

A. This type of repair shall be made only on Florida Department of Transportation roadways when the original pavement is concrete.

B. The existing pavement shall be saw cut in straight lines as outlined by the City at the location of the replacement. The pavement shall be removed and the fill shall be mechanically compacted to 98% of the maximum density obtainable as determined by AASHTO Standard T-180. The fill in the trench and shoulders shall be brought to a

depth equal to the thickness of the existing concrete pavement, but not less than 8 inches in any case. The opening thus formed, shall be filled with concrete having a design strength of 5,000 psi and made with High Early Strength Cement. The concrete slab shall be reinforced with ½ inch steel reinforcing rods, 12 inches on center each way, placed 2 inches above the bottom of the slab. The surface of the slab shall be struck off with a screed and finished with a wood float and brush to conform to the grade and finish of the existing pavement. Apply liquid curing compound after initial set. The Contractor shall provide adequate means to protect the slab until it has cured sufficiently to withstand vehicular traffic without spalling or breaking apart. Construction joints and expansion joints in the original pavement shall be reproduced in the repair with matching materials.

END OF SECTION

02765 PAVEMENT MARKINGS AND TRAFFIC SIGNS

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

This section consists of pavement markings and traffic signs on the Drawings, specified herein and as required for a complete installation.

1.0.2. QUALITY ASSURANCE

A. The phrase "DOT Specifications" shall refer to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. The DOT Specifications, are referred to herein and are hereby made a part of this Contract to the extent of such references, and shall be as binding upon the Contract as though reproduced herein in their entirety.

B. Pavement markings for this Project shall conform to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. Pavement markings removed or obliterated by the Contractor's operations shall be promptly replaced in kind to the satisfaction of the City of Opa-Locka Public Works Department, or other authority having jurisdiction over the work area.

1.0.3. CERTIFICATION

The Contractor shall furnish the manufacturer's certification that all signs furnished conform to these specifications and shall replace or repair at his expense all signs that fail to meet this requirement.

PART 2 - PRODUCTS

2.0.1. PAVEMENT MARKING

Paint for pavement strips shall be as specified in Part 3, Execution.

2.0.2. REFLECTIVE MARKERS

Reflective markers shall be installed in the pavement in accordance with OSHA, DOT and City of Opa-Locka Public Works requirements.

2.0.3. TRAFFIC SIGNS

A. General: Traffic regulating signs shall conform to the colors, dimensions and requirements of the Manual on Uniform Traffic Control Devices (ANSI) and displaying the lettering and symbols indicated on the Drawings.

B. Sign Panels and Support Members: Sign panels and support members shall conform to Aluminum Association Alloy 6061-T6.

C. Bolts: Bolts shall conform to Aluminum Association Alloy 2024-T4 with an anodic coating 0.0002-inches thick minimum and chromate sealed.

D. Nuts: Nuts shall conform to Aluminum Association Alloy 6269-T9.

E. Reflective Sheeting: Reflective sheeting shall conform to DOT Type A requirements.

F. Construction Warning Signs: The CONTRACTOR shall install traffic and warning signs during construction in accordance with OSHA, DOT and Dade County Public Works requirements.

PART 3 - EXECUTION

3.0.1. TRAFFIC PAINT

A. This type of pavement painting shall be used where no thermoplastic paint is required or as temporary paint during the time required for paving "cure" prior to application of thermoplastic paint markings.

B. Traffic paint used for this work shall conform with the requirements of Section 971-12 of the Florida Department of Transportation Standard Specifications for Road and bridge Construction, or, at the Contractor's option, fast dry traffic paint, as specified in D.O.T. Specifications, Section 971-13, may be used.

C. The colors of the paint shall be yellow or white, as existed before the repair.

D. All equipment shall be of a type and design which will readily produce the required uniformity of application of the stripes, both as to thickness of coating and alignment. The paint machine shall be of the spray type, capable of spraying the paint to the required "spread" without thinning of the paint. The paint tank shall be equipped with a mechanical agitator. The nozzle shall have cut-off valves which will apply broken or "skip" lines automatically. Each nozzle shall also be provided with suitable line guides, either metallic shrouds or air blasts.

E. Painting shall be done only during daylight hours and, as far as practicable, shall be terminated in time to permit sufficient drying by sunset. No paint shall be applied when moisture is present on the surface to be painted or when the air temperature is below 40 degrees

F. Painting shall not be done when winds are sufficient to cause spray dust. F. The surface which is to be painted shall be cleaned, by compressed air or other effective means, immediately before the start of painting, and shall be clean and dry when the

paint is applied. Any vegetation or soil shall be removed from the pavement before edge striping is begun.

G. The paint shall be thoroughly mixed before it is poured into the painting machine and no thinning of the paint will be allowed at any time. Before the start of each day's work, the paint container, the connections, and the spray nozzles on the machine shall be thoroughly cleaned with paint thinner or other suitable cleaner.

H. The traffic stripe shall be of the specified width, with clean, true edges and without sharp breaks in the alignment. A uniform coating of paint shall be obtained and the finished stripe shall contain no light spots or paint skips. Any stripes which do not have a uniform, satisfactory appearance, both day and night, shall be corrected.

I. All newly painted stripes, including edge stripes, shall be protected until the paint is sufficiently dry to permit vehicles to cross the stripe without damage from the tires. While the center line stripes are being painted, all traffic shall be routed away from the painting operations and the newly painted stripe. When necessary, a pilot car shall be used to protect the painting operations from traffic interference.

J. Any portions of the stripes damaged by passing traffic or from other causes shall be repainted.

K. Paint for temporary pavement markings shall also be used where thermoplastic markings are to be applied after the asphaltic concrete has "cured." The cure time shall be based on thermoplastic manufacturer's recommendations. However, in accordance with FDOT requirements, asphalt shall have been in place for 30 days before application of thermoplastic stripe.

3.0.2. THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS

A. Thermoplastic pavement markings, including stripes, pavement messages, stop bars, directional arrows, reflective pavement markers and other miscellaneous items, shall be replaced as existed before the repair was made. The thermoplastic compound shall be extruded or sprayed onto the pavement surface in a molten state by mechanical means, with surface application of glass spheres, when required. Upon cooling to ambient pavement temperature, the compound shall produce an adherent pavement marking of specified thickness and width and capable of resisting deformation.

B. The colors of the compound shall be white or yellow, as existed before the repair.

C. Where thermoplastic markings are to be applied to concrete pavement, a sealing primer, as specified in F.D.O.T. Specifications Section 711-2.2, shall be applied in advance of the placing of the stripes.

D. The thermoplastic shall be applied to the pavement utilizing either extrusion or spray application equipment. The application equipment shall be so constructed as to provide continuous mixing and agitation of the material. Conveying parts of the equipment between the main material reservoir and the shaping die or gun shall be so constructed as to prevent accumulation and clogging. The equipment shall be constructed so that all mixing and conveying parts up to and including the shaping die or gun, maintain the material at the plastic temperature with heat transfer oil or electrical element controlled heat. Direct fire heat transfer will not be allowed.

E. The application equipment shall be so constructed as to insure continuous uniformity in the dimensions of the stripe. The applicator shall provide a means for cleanly cutting off square stripe ends and shall provide a method of applying "skip" lines. The use of pans, aprons, or similar appliances which the die overruns will not be permitted.

F. Glass spheres applied to the surface of the completed stripe shall be applied by an automatic bead dispenser attached to the striping machine in such a manner that the beads are dispensed almost instantaneously upon the installed line.

G. Special kettle(s) shall be provided for melting and heating the thermoplastic material. The kettle(s) shall be equipped with automatic thermostatic control devises to provide uniform temperature control and prevent overheating of the material. The applicator and kettle(s) shall be equipped and arranged as to satisfy the requirements of the National Fire Underwriters, the State of Florida, Dade County and any municipal authority applicable to where the work is being done.

H. Applicators shall be mobile and maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. The applicator equipment to be used on roadway installations shall consist of either hand equipment or truck mounted units depending on the type of marking required.

I. The hand applicator equipment shall be insulated, have sufficient capacity to hold 150 pounds of molten material, and be sufficiently maneuverable to install crosswalks; lane, edge and center lines; arrows and legends.

J. The truck mounted unit for lane, edge and center lines shall consist of a mobile selfcontained unit carrying its own material capable of operating at a minimum speed of five miles per hour while installing striping.

K. Application time, weather limitations and surface preparation shall be in accordance with FDOT. Specifications Sections 710-4, 710-5 and 710-8. In accordance with FDOT requirements, asphalt shall have been in place for 30 days before application of thermoplastic stripe.

L. The material, when formed into traffic stripes or other markings, shall be readily renewable by placing an overlay of new material directly over an old line of compatible material in such a manner that no splitting or separation takes place.

M. The application temperature shall be within the range specified by the manufacturer of the thermoplastic compound being used.

N. All pavement edge lines, gore, island and diagonal strip markings, bike lane symbols and messages, wherever located, shall have a minimum thickness of 0.060 inch at the edges and a maximum thickness of 0.120 inch at the center. A minimum average film thickness of 0.060 inch shall be maintained. All lane lines, center lines, transverse markings (except shoulder markings) and pavement markings within traffic wearing area (such as dotted turning guide lines) shall have a minimum thickness of 0.090 inch at the edges and a maximum thickness of 0.188 inch at the center. A minimum average film thickness of 0.090 shall be maintained. All thickness measurements shall be an average in any three foot length.

O. The glass sphere top coating shall be applied by a type of glass sphere dispenser or gun which will embed the spheres into the line surface to at least one-half their diameter. The glass sphere top coating shall not incur more than a 10 percent loss during the first 30 days of traffic exposure.

P. Reflective pavement markers shall be installed as they existed before the repair. They shall be replaced with the appropriate color or colors and oriented in the correct direction as specified in Section 706 of the F.D.O.T. Specifications. Paving markings for this Project shall conform to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, as revised by the governing agency.

3.0.3. FABRICATION

Preparation of sign blanks and fabrication of reflectorized faces shall conform to the applicable requirements of DOT Sections 700-4 and 700-5.

END OF SECTION

02840 CONCRETE BARRIER

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

A. Construct precast or cast in place concrete barriers, traffic railings, opaque visual barriers, and parapets, herein referred to as rigid barrier, in accordance with the Standard Plans and the details shown in the Plans. Use stationary removable forms or sliding forms to construct the rigid barrier. Do not use permanent precast concrete rigid barrier on bridge or box culvert structures.

B. Submit written certification from the manufacturer of the precast rigid barrier that the barrier meets the requirements of this Section. Rigid barrier is produced using certification acceptance; therefore, assume responsibility for performance of quality control testing and inspections required by Sections 346 and 400 of FDOT's Standard Specifications Manual. Perform all Quality Control Testing and inspections using CTQP qualified testing personnel. Perform compressive strength testing in a laboratory inspected by CCRL or CMEC.

C. Ensure that each shipment of products to the job site includes a list of products shipped and the required written certification statement for each product. Submit this list and certifications to the Engineer.

PART 2 - PRODUCTS

2.0.1. MATERIALS

A. Meet the following requirements:

Flowable Fill .....Section 121
Concrete ..... Sections 346 and 347
Reinforcing Steel .....Section 415
Joint Materials..... 932-1.1
Joint Materials*..... 932-1.2 and 932-1.3 Barrier
Delineators *.....Sections 705

*Use products listed on the Department's Approved Product List (APL).

PART 3 - EXECUTION

3.0.1. CONSTRUCTION

A. General: The Contractor may use stationary removable forms or slip form construction methods provided a completed rigid barrier with acceptable alignment and finish is obtained. Do not use forms which are damaged or are not in alignment. At no expense to the Department, remove and replace sections of rigid barrier having unconsolidated concrete, surface blemishes, deviations in alignment or profile which exceed tolerances, or other defects which cannot be repaired to the satisfaction of the Engineer.

B. Stationary Form Construction: Provide precast or cast in place concrete rigid barrier constructed using stationary forms in accordance with Section 400 and provide a general surface finish. Align and erect the stationary form so that all plane surfaces of the finished barrier will have no deviation greater than 3/8 inch measured as an ordinate between the concrete and a 10 foot straightedge. Correct all alignment deviations greater than 3/8 inch. Straightedge by half lapping the straightedge for the full length of all plane surfaces.

C. Slip Form Construction: When electing to use the slip form method in lieu of the stationary forming method, place the concrete with a slip form machine approved by the Engineer. The concrete cover tolerance is plus or minus 3/4 inches from the plan dimensions, except the minimum concrete cover, as constructed, must not be less than 1-3/4 inches.

Provide a finished texture to the slip formed rigid barrier by hand troweling, brushing, or both to eliminate pockmarks, blemishes and any other discontinuities in surface texture. Ensure that the final finish has a fine texture and is free of pinholes, pockmarks, and blemishes.

Remove and recast or repair sections of slip formed rigid barrier having areas of unconsolidated concrete, having surface blemishes, and/or having pockmarks greater than 1/2 inch in diameter after hand troweling and brushing. Repair areas of unsatisfactory surface finish by hand methods using mortar screened from the concrete used to construct the rigid barrier. Use the mortar screened from the rigid barrier concrete only to fill holes and surface blemishes below the slip formed surface of the concrete. Do not use mortar as a surface overlay coating on the rigid barrier concrete.

During the finishing operation, while the concrete remains plastic, straightedge all plane surfaces of the slip formed rigid barrier with a 10 foot straightedge. Straightedge by half lapping the straightedge for the full length of the plane surfaces. Correct any deviation found during straightedging, greater than 3/8 inch, measured as an ordinate between the concrete surface and the straightedge, in an approved manner at no expense to the Department. Do not use surface overlay coatings of mortar screened from the concrete, or surface overlay coatings of concrete to correct alignment deviations.

3.0.2. JOINTS

A. General: Place expansion and contraction joints in concrete rigid barrier either mounted on or adjoining rigid structures in a manner similar to the type and method of jointing used in the supporting or adjoining structure or as shown in the Contract Documents. Place expansion and contraction joints in concrete rigid barrier supported by soil or flexible foundation materials in the manner detailed in the Plans.

B. Contraction Joints in Rigid Barrier Supported by or Adjoining Rigid Structures: The Contractor may form or saw contraction joints. When sawing contraction joints, saw them as soon as the concrete has hardened sufficiently to permit sawing without raveling and before uncontrolled cracking occurs, but in no case later than 12 hours after casting. Match contraction joints to adjacent contraction joints in the structure. Space contraction joints at 15 to 30 foot intervals. For rigid barrier on bridge structures or approach slabs, space contraction joints as shown in the Contract Documents.

C. Expansion Joints in Rigid Barrier Supported by or Adjoining Rigid Structures: Construct expansion joints at right angles to the face, and extend them through the entire crosssection of the rigid barrier. Construct expansion joints at the same location and width as the expansion joints in the structure on which the rigid barrier rests and at other locations shown in the Contract Documents. Form expansion joints with an expansion filler material or removable forming materials and secure to the forms as required to provide proper position.

3.0.3. REPAIRS AND REJECTION

A. For permanent precast concrete rigid barrier that has not been installed, evaluate cracks, spalls and other deficiencies in accordance with 450-12. Repair deficiencies in accordance with 450-13 or the plant's approved repair methods that are included as part of the Quality Control (QC) Plan. Ensure that the original performance and durability of the repaired rigid barrier is maintained. Use materials for concrete repair that will meet or exceed the strength requirement for the class of concrete used. Materials meeting the requirements of Section 930 may be substituted for non-shrink grout when required by 450-13. Concrete rigid barrier is subject to rejection if it fails to conform to any of the Specification requirements after repair. The disposition of concrete cracks in rigid barrier after installation shall be in accordance with 400- 21.

END OF SECTION

02900 LANDSCAPING

PART 1 – GENERAL

1.0.1 SCOPE OF WORK

D. Work included in this Section includes tree removal, tree relocations, furnishing and planting trees, plants and grass of the species, sizes and quality specified, fertilizing, watering, maintaining plants, guarantee and obtaining all permits from municipalities having jurisdiction over this work.

E. The schedule of trees and plants, if applicable, is shown on the drawing, and indicates the common and botanical names, the quantities and sizes of plants to be used.

F. Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf with well developed root systems free of disease and insects, pests, eggs or larvae. No plants will be accepted unless healthy and showing satisfactory foliage conditions.

1.0.2. Solid sod and grass submittal to be submitted to the Engineer or Record for approval prior to installation.

PART 2 - PRODUCTS

2.0.1. GRASSING, SOLID SOD AND SEED:

A. General:

1. Solid sod shall be planted in the unpaved areas abutting the structures and extending to the limits shown on the Plans.

2. Grass seeding: All other unpaved areas shall be planted with grass seed and mulched.

3. When solid sod or grass seed is to be placed adjacent to or in close proximity to existing sod or grass, the Contractor is to use similar sod or grass and obtain approval from the Engineer of Record prior to installation. In public areas and rightof-ways the Contractor is also required to comply with Governmental Agency requirements and provide the City with written approval of said agency prior to installation of grass and sod.

B. Materials:

1. Solid Sod:
   a. Solid sod shall be certified bitter blue St. Augustine Floratam. The sod shall be firm touch texture having a compact growth of grass with good root development. It shall contain no weeds or other objectionable vegetation.

b. The soil embedded in the sod shall be good clean earth, free from stones and other debris. The sod shall be free from fungus, vermin and other diseases. The sod and soil shall be approximately 2" thick.

c. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be cut into uniform dimensions approximately 12" X 24". Abutting joints shall be free of open spaces with a tamped or rolled surface so that there are no joint openings.

2. Topsoil: Soil utilized for planting grasses shall be a mixture of pulverized 50% rock free siliceous sand and 50% clean mulch from an approved source. All ingredients shall be free of sticks, roots, rocks, lumps or other impurities or debris. All soil shall be delivered in a loose friable condition. Topsoil may be "unsuitable top soil" removed during the course of other work hereunder, if approved by the Engineer of Record. Topsoil shall be free of undesirable plants and seeds. Any such plants sprouting from areas of recent topsoil application shall be presumed to have originated in the topsoil and shall be eradicated from the area by the Contractor at his expense. Means of eradication shall be submitted to the Engineer of Record for approval.

C. Planting of Grassing:

1. Solid Sod: Unless otherwise directed by the Engineer, four inches of topsoil shall be placed. The ground area shall be saturated with water. Sod shall be placed on the graded and watered ground firmly butted on all sides by sod without leaving holes, slots, or depressions. Sod shall be top dressed with soil (herein before specified) where required to bring all fill to voids and provide a uniform grass matt if approved by the Engineer of Record. Soil shall firmly abut all structures to which it surrounds or contacts. Immediately after the grassing process, the entire grassed or mulched area shall be rolled thoroughly with a cultipacker traffic approved roller, or other 1,000 pound roller. At least two trips over the entire area will be required.

2. Grass Seeding: As above, place four inches of topsoil and saturate with water. Thereafter seed and mulch

D. Fertilizing Grassing:

1. Commercial fertilizers shall comply with all Federal, State and County fertilizer laws.

2. The numeral designations for fertilizer indicate the minimum percentage (respectively) of (1) total nitrogen, (2) available phosphoric acid, and (3) water soluble potash, contained in the fertilizer.

3. Designations may be approved specifically for a particular project and if liquid fertilizer other than that of chemical designation 8-8-8 is used, the total nitrogen content shall not exceed 12 percent.

4. At the Contractor's option liquid or dry fertilizer may be used. All grass shall be fertilized and watered in during the planting operation using the application rate and method directed by the manufacturer of the fertilizer used.

E. Guarantee and Maintenance of Grassing:

1. Guarantee:

a. The Contractor shall guarantee all grasses for a period of six months from the date of acceptance of the completed overall project from the Contractor.

b. The Contractor shall guarantee the grasses shall be alive, free of disease and have a healthy appearance at the end of the guarantee period.

c. During the guarantee period, the Contractor shall replace any grass which is diseased, dead or visually unsightly within 3 days when requested in writing.

2. Maintenance:

a. The Contractor shall maintain all grass guaranteed above for the period of the guarantee. Such maintenance shall include filling, leveling, and repairing eroded areas, replanting areas where the establishment of the grass does not develop satisfactorily, and watering as required. In no case shall such maintenance be less than 3 weeks for watering and 6 weeks for remaining maintenance care.

b. The maintenance of the grass shall include, regular mowing, one application of approved dry or liquid fertilizer to the grasses guaranteed above. The fertilizer shall be applied and watered in as directed by the manufacturer. The time of fertilizing shall be approved.

c. The Contractor shall be required under the maintenance of the guaranteed grasses to safeguard and take all possible precautions against damage from the elements and other possible damage. The Contractor shall be required to clean up the effected landscape area during the maintenance period due to any such event. The Contractor shall not be responsible to replace grasses

properly protected under this item of the specifications, damaged by the events beyond his control.

2.0.2. PLANTS AND TREES: (If required by relocation and if shown on the drawings)

A. Grade Standards and Quality:

1. Quality of all plants shall be at least equal to that defined as No. 1 by the State Plant Board of Florida in Grades and Standards for Nursery Plants, Part I, 1963 Revised Edition, and Part II, Palms and Trees.

2. All plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall have healthy, well developed root systems and shall be free of disease and insect pests, eggs or larvae.

3. No plants will be accepted unless they are healthy and show satisfactory foliage conditions.

4. All plants shall conform to the measurements specified or indicated on the Drawings except that up to 10 percent of undersized plants in any one variety or grade may be used provided there are sufficient oversized plants to make the average equal to or above specified grade. Plants larger than specified may be used if approved by the Engineer of Record, but use of such plants shall not increase the Contract price. The spread of roots or ball of earth for larger plants shall be increased in proportion to the size of the plant.

B. Plant Designation: With reference to method of cultivation, root system status, etc., plants for landscaping shall be classified under the following designations:

1. Balled and Burlapped:

a. Plants so classified shall be dug with firm natural root balls of earth, of sufficient diameter and depth to include most of the fibrous roots. The root ball of these plants shall be properly wrapped with burlap sack material and remain protected and moist until they are planted. Plants whose burlapped balls have cracked or become sagging, or plants showing scars from rope and cable marks or other improper handling are not acceptable. All balled and burlapped plants which cannot be planted immediately upon delivery shall be set on the ground and shall be well protected with soil, wet moss, or other acceptable material. The plants shall be set with the burlap cover intact and with the burlap showing, until inspection. At final inspection, the burlap may be cut away to ground level and completely covered with soil.

b. It is required that, balled and burlapped materials, 1½ inches or more in caliper, shall be root-pruned at least 45 days before being dug and such fact shall be certified on accompanying invoices. Where, in the opinion of the Engineer of Record following his inspection of the grower's stock, adequate root pruning is being obtained by the grower's general cultivating practices, he may consider such fact as meeting this requirement.

2. Wire Balled and Burlapped:

a. Plants grown in soil of a loose texture which does not readily adhere to the root system shall have sound hog wire placed around the burlapped ball before the plant is removed from the excavation. The wire shall be looped and tensioned until the burlapped ball is substantially packaged so as to prevent loosening of the soil around the roots during handling.

b. Wire balled and burlapped plants shall otherwise comply with the requirements for balled and burlapped plants described in 1 above.

3. Container Grown Plants:

a. Container grown plants shall have been grown in a container large enough and for sufficient time for the root system to have developed well enough to hold its soil together firm and whole. No plants shall be loose in the container. Plants which have become pot bound or for which the top system is too large for the size of the container, will not be acceptable.

b. All containers with vertical sides shall be cut and opened fully, in a manner such as will not damage the root system. Container grown plants shall not be removed from the container until immediately before planting, when all due care shall be taken to prevent damage to the root system.

4. Bare-Root Plants: No bare-root plants shall be used unless specifically required by the Engineer of Record or called for on the drawings.

5. Palms:

a. Palm species shall have the roots adequately wrapped before transplanting except when they are container grown. Burlapping will not be required if the palm is carefully dug from marl or heavy soil that it adheres to the roots and retains its shape without crumbling. During transporting and after arrival, root balls of palm shall be carefully protected from the wind and exposure to the sun. After delivery to the job site, if palm is not planted within 24 hours, the root ball shall be covered with a moist material.

b. All moving of sabal, coconut and royal palms shall be in accordance with Heavy Trunk Palms, as described in "Florida Grades and Standards for Nursery Plants, Part II".

6. Rooted Cuttings: Cuttings shall be kept moist at all times. They shall be rooted in a medium other than wood shavings and have at least 4 root tips of ½-inch or longer.

C. Transportation and Inspection:

1. Plant transportation shall comply with all Federal and State regulations therefor and, upon delivery at the site, all plants shall be inspected for conformity to specifications and for handling damage. Rejected plants shall be removed immediately from the site by the Contractor.

2. Foliage trees when moved in full leaf shall be treated with "Wilt Pruf" or "Plantguard", as they are loaded at their growing site. This material shall be applied to the entire tree with a fine spray at a dilution of 1 part "Wilt Pruf" or "Plantguard" to 15 parts of water.

3. Trees which have to be transported in excess of 10 miles to reach the job site, shall be covered with a 70 percent shade-cloth-tarp, or equal in order to prevent wind burn.

4. Immediately following the delivery and inspection at the job, all plants with exposed roots shall be heeled-in moist soil or peat moss. All plants heeled-in shall be properly maintained by the Contractor until planted.

5. The balls of balled and burlap plants, must, if not immediately planted after delivery and inspection, be adequately protected by covering until removed for planting, in a manner appropriate to prevailing conditions and in accordance with accepted horticultural practices. The Contractor shall, in loading, unloading, or handling of plants, exercise utmost care to prevent injuries to the branches or roots of the plants. The solidity of the ball of balled and burlapped plants shall be carefully preserved. Handling of the plant by parts other than the ball shall be cause for rejection of such plant. Bare root plants which have been heeled-in shall be properly handled during the distribution of planting beds.

D. Planting Materials:

1. Planting Soil: Planting soil shall be a pulverized mixture of 50% rock free siliceous sand and 50% clean mulch from an approved source. All ingredients shall be free of sticks, roots, rocks, lumps, or other impurities or debris. All soil shall be delivered in a loose friable condition.

2. Fertilizer:

    a. Fertilizer shall be as specified in subsection 2.01-D, herein.

    b. Fertilizer shall be selected and used as recommended by the manufacturer for each particular plant.

3. Mulch: Mulch shall be ground bark, bark peelings, peat, hay or straw. Cypress mulch shall not be used because its harvest degrades cypress wetlands.

4. Anti-Desiccant: Anti-desiccant shall be "Wilt Pruf", "Plantguard", or equal, delivered in the manufacturer's containers and used in accordance with the manufacturer's instructions.

5. Water:

    a. Water for the irrigation of the new plantings during the progress of construction shall be provided by the Contractor in accordance with the provisions previously specified.

    b. The Contractor shall furnish adequate watering equipment and shall continue watering to properly establish the new plantings throughout the maintenance period.

6. Wire: Wire for the bracing and guying shall be pliable No. 12 or No. 14 gauge galvanized soft steel wire.

7. Stakes and Ties: Stakes and ties shall be provided in accordance with the requirements of PART 3 EXECUTION, below.

PART 3 - EXECUTION

3.0.1. EXCAVATION OF PLANT HOLES:

A. Plant hole excavations shall be roughly cylindrical in shape, with the sides approximately vertical. Plants shall be centered in the hole, with the trunk location as shown in the Plans.

B. Bottoms of the holes shall be loosened at least 6-inches deeper than the required depth of excavation.

C. Holes for balled and burlapped and wire balled and burlapped plants shall be large enough to allow at least 8-inches of backfill around the earth ball. For root balls over 18-inches in diameter, this dimension shall be increased to 12-inches.

D. Where excess material has been excavated from the plant hole, the excavated material shall be disposed of as and where directed by the Engineer of Record.

E. PREPARATION OF GROUND

1. Four inches minimum thickness of topsoil shall be placed over the areas off the right of way on which the sod is to be placed.

F. APPLICATION OF FERTILIZER

1. Before applying fertilizer, the soil pH shall be brought to a minimum range of 6.0 - 7.0.

2. The fertilizer shall be spread uniformly over the area to be sodded at the rate of 500 pounds per acre, by a spreading device capable of uniformly distributing the material at the specified rate. Immediately after spreading, the fertilizer shall be mixed with the soil to a depth of approximately 4-inches.

3. On steep slopes, where the use of a machine for spreading or mixing is not practicable, the fertilizer shall be spread by hand and raked in and thoroughly mixed with the soil to a depth of approximately 2-inches.

G. PLACING SOD

1. The sod shall be placed on the prepared surface, with edges in close contact and shall be firmly and smoothly embedded by light tamping with appropriate tools. Sod areas abutting concrete, asphalt or other applicable surfaces shall have the soil depressed at edges of the pavements so that the cut grass does not protrude over 2-inches above the adjacent property.

2. Where sodding is used in drainage ditches, the setting of the pieces shall be staggered so as to avoid a continuous seam along the line of flow. Along the edges of such staggered areas, the offsets of individual strips shall not exceed 6-inches. In order to prevent erosion caused by vertical edges at the outer limits, the outer pieces of sod shall be tamped so as to produce a featheredge effect.

3. On steep slopes, the Contractor shall, if so directed by the Engineer of Record, prevent the sod from sliding by means of wooden pegs driven through the sod blocks into firm earth, at suitable intervals.

4. Sod which has been cut for more than 72 hours shall not be used unless specifically authorized by the Engineer of Record after his inspection thereof. Sod which is not planted within 24 hours after cutting shall be stacked in an approved manner and maintained and properly moistened. Any pieces of sod which, after placing, show an appearance of extreme dryness shall be removed and replaced by fresh, uninjured pieces.

5. Sodding shall not be performed when weather and soil conditions are, in the Engineer of Record's opinion, unsuitable for proper results.

H. WATERING

1. The areas on which the sod is to be placed shall contain sufficient moisture, as determined by the Engineer of Record, for optimum results. After being placed, the sod shall be kept in a moist condition to the full depth of the rooting zone for at least 2 weeks. Thereafter, the Contractor shall apply water as needed until the sod roots and starts to grow for a minimum of 60 days (or until final acceptance whichever is latest).

3.0.2. UNDERGROUND OBSTRUCTIONS:

A. In the event that rock, underground construction work, utility lines or obstructions out of the ordinary are encountered in any plant hole excavation, alternative locations will be selected by the Engineer of Record.

B. Where locations cannot be changed and the obstructions may be removed, the obstructions shall be removed to a depth of not less than 3-feet below grade and not less than 6-inches below bottom of balls or roots when plant is properly set at the required grade.

3.0.3. SETTING OF PLANTS:

A. When lowered into the hole, the plant shall rest on a prepared hole bottom such that the roots are level with, or slightly above, the level of their previous growth and so oriented such as to present the best appearance. The Contractor, when setting plants in holes, shall make allowances for any anticipated settling of the plants.

B. The backfill shall be made with planting mixture as specified hereinbefore and shall be firmly rodded and watered-in, so that no air pockets remain. The quantity of water applied immediately upon planting shall be sufficient to thoroughly moisten all the backfilled earth. Plants shall be kept in a moistened condition for the duration of the Contract.

3.0.4. STAKING AND GUYING:

A. When called for on the Drawings or directed by the City, plants shall be staked in accordance with the following provisions:

1. Small Trees: For trees and shrubs of less than 1-inch caliper, the size of stakes and the method of tying shall be such as to rigidly support the staked plant against damage caused by wind action or other effects. Trees larger than 1-inch and smaller than 1½ inch caliper shall be staked with a 2-inch square stake driven at least 24inches in the ground and extending to the crown of the plant. The plant shall be firmly fastened to the stake with two strands of 14 gauge soft wire, enclosed in rubber hose, or other approved covering. The wire shall then be nailed or stapled to the stake to prevent slippage.

2. Medium Trees: All trees, other than palm trees, larger than 1½-inch caliper and smaller than 2½-inch caliper shall be staked with two or more, 2-inch by 2-inch stakes, 8-feet long, set 2-feet in the ground. The tree shall be midway between the stakes and held firmly in place by two strands of 12 gauge wire, applied as specified above for single stakes. Tie wires shall be tightened and kept tight by twisting.

3. Large Trees: All trees, other palm trees, larger than 2½-inch caliper, shall be guyed from at least 3 points with double strands of 12 gauge wire. Guy wires shall be anchored to 2-inch by 4-inch stakes, 24-inches long, driven into the ground at least 2-feet and sufficient that the top of the stake is at least 3 inches below the finished ground level. In firm rock soils, No. 4 steel reinforcing rods or ½-inch pipe may be used instead of 2 by 4's. Tie wires shall be securely fastened to the tree by means of a collar of rubber hose, or other approved material. Guy wires shall be tightened and kept tight by twisting.

4. Palm Trees: Brace palm trees with three or more 2-inch by 4-inch wood braces, toenailed to cleats which are securely banded at two points to the palm, at a point at least 6-feet above the ground. The trunk shall be padded with five layers of burlap under the cleats. Braces shall be approximately equidistantly spaced and secured underground with 2-inch by 4-inch by 24-inch stake pads. In firm rocky soils, No. 4 steel reinforcing rods or ½-inch pipe is acceptable.

3.0.5. PRUNING:

All broken or damaged roots shall be cut off smoothly and the tops of all trees shall be pruned in a manner complying with standard horticultural practice. At the time pruning is completed, all remaining wood shall be alive. All cut surfaces of 1-inch or more in diameter, above the ground, shall be treated with an approved commercial tree paint.

3.0.6. MULCHING:

Within one week after the planting, mulch material, approved by the Engineer of Record, shall be uniformly applied to a minimum thickness of 2-inches, over the entire area of the backfilled hole or bed. The mulch shall be maintained continuously in place until the time of final inspection. Mulch is not required if other ground surface covers, such as rooted cuttings are called in the Plans.

3.0.7. INSPECTION:

On completion of the work, the Engineer of Record will inspect all planting work. The Contractor shall repair or replace all defective work, whichever is unsatisfactory to the Engineer of Record or the City. Preliminary acceptance of all plant materials will be given only after the materials are planted and after meeting all requirements prescribed herein.

3.0.8. MAINTENANCE:

A. Maintenance shall begin immediately after each plant is planted and shall continue until all work under this Contract has been completed and final acceptance is obtained from the City, however, the minimum period of this maintenance shall not be less than 60 days even if it extends beyond final acceptance of contract. Plants shall be watered, mulched, weeded, pruned, sprayed, fertilized, cultivated and otherwise maintained and protected. Settled plants shall be reset to proper grade position, planting saucer restored and dead material removed. Guys shall be tightened and repaired.

B. Defective work shall be corrected as soon as possible after it becomes apparent. Upon completion of planting, the Contractor shall remove from the site excess soil and debris, and repair any damage to structures, etc., resulting from planting operations.

3.0.9. GUARANTEE:

The Contractor shall guarantee all planting work for a period of six months after the date of final acceptance. During the guarantee period, the Contractor shall replace at no cost to the City any plant that dies or is not established within the guarantee period. Any plants missing or defective shall be furnished or replaced in a manner satisfactory to the City.

END OF SECTION

DIVISION 3 – CONCRETE

03300 CAST-IN-PLACE CONCRETE, REINFORCING AND FORMWORK

PART 1 – GENERAL 1.0.4.

SCOPE OF WORK

A. Provide all labor, materials, equipment, fabrication, incidentals, transportation, placing and supervision necessary to complete all cast-in-place concrete work, its finishing, and all related work called for by the Contract Drawings and/or specifications, or reasonably inferable from either or both, as needed for a complete and proper installation.

B. Work affecting this Section includes, but is not limited to:

1. Shop Drawings-Per General Conditions and as specified herein.
2. Materials and storage thereof.
3. Reinforcing-Bar and fabric.
4. Accessories of every nature, including form tie system.
5. Formwork and removal thereof, including shoring and reshoring.
6. Concrete proportions and mixes.
7. Placing of concrete.
8. Admixtures.
9. Joints, metal joint screeds and joint fillers.
10. Finishes of all types.
11. Protection and curing.
12. Patching.
13. Laboratory Testing.

1.0.5. QUALITY ASSURANCE

A. Unless otherwise indicated, all materials, workmanship and practices shall conform to the requirements of ACI 301-96 "Specifications for Structural Concrete for Buildings", except as modified by supplemental requirements hereinafter.

B. All reinforced concrete structures shall conform to ACI 301, ACI 302.1R, ACI 305, ACI 306, ACI 315, ACI 318, and ACI 350.

C. Concrete shall be composed of cement, fine aggregate, coarse aggregate, and water, so proportioned and mixed as to produce a plastic workable mixture in accordance with all requirements under this Section suitable to the specific conditions of placement.

D. Work shall be performed in accordance with Contract Documents, Drawings, and/or City of Opa-Locka Public Works Manual Specifications and Standard Details, in a neat and accurate manner. It is the intent of the City to obtain a complete and working installation according to these Specifications, and any items of labor, equipment, or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the project plans or stated herein.

1.0.6. STANDARDS

A. ACI 301-96 Specifications for Structural Concrete.

B. ACI 318-95 Building Code Requirements for Reinforced Concrete.

C. Florida Building Code, latest edition.

D. ACI 117-90 Standard Specifications for Tolerances for Concrete Construction and Materials

PART 2 – PRODUCTS

2.0.3. GENERAL

B. All reinforced concrete structures shall conform to ACI 301, ACI 302.1R, ACI 305, ACI 306, ACI 315, ACI 318, and ACI 350.

C. Concrete shall be composed of cement, fine aggregate, coarse aggregate, and water, so proportioned and mixed as to produce a plastic workable mixture in accordance

with all requirements under this Section suitable to the specific conditions of placement.

2.0.4. CEMENT

D. The cement shall be a standard brand of Portland cement manufactured within the continental limits of the United States. It shall meet the requirements of ASTM C150 "Portland Cement" and shall be Type II.

E. The total alkalies in the cement (calculated as the percentage of NA2O plus 0.658 times the percentage of K2O) shall not exceed 0.40%.

F. The proposed Portland Cement shall not contain more than 8% tricalcium aluminate and more than 12% tetracalcium aluminoferrite.

G. Different types of cement shall not be mixed nor shall they be used alternately except when authorized in writing by the City or their designee. Different brands of cement or the same brand from different mills may be used alternately. A resubmittal will be required if different cements are proposed during the Project.

H. Cement shall be stored in a suitable weather-tight building so as to prevent deterioration or contamination. Cement which has become caked, partially hydrated, or otherwise damaged will be rejected.

2.0.5. FLY ASH

A. If fly ash is used as supplementary cementitious material, it shall meet the physical and chemical requirements of ASTM C618 Class F, except that the loss of ignition shall not exceed 4%. Sampling and testing of fly ash shall follow the requirements of ASTM C311.

B. For Type A1 concrete as required for use in environmental engineering concrete structures, inclusion of fly ash or slag cement in the concrete mix is mandatory

2.0.6. SLAG CEMENT

D. Slag cement shall meet the requirements of ASTM C989 including tests for effectiveness of slag in preventing excessive expansion due to alkali-aggregate reactivity as described in Appendix X-3 of ASTM C989.

E. For Type A1 concrete as required for use in environmental concrete structures, i.e., process structures or fluid containing structures, inclusion of fly ash or slag cement in the concrete mix, is mandatory.

2.0.7. WATER

B. The water used in mixing the concrete shall be from potable water supplies that are approved by the Florida Department of Health.

2.0.8. AGGREGATES

A. Fine Aggregate (Sand) in the various concrete mixes shall consist of natural or manufactured siliceous sand, clean and free from deleterious substances, and graded within the limits of ASTM C33.

B. Coarse Aggregate: Coarse aggregate shall consist of gravel, broken stone or local limerock. Coarse aggregate shall be size #57 or #67 as graded within the limits given in ASTM C33 unless otherwise specified. It shall be free from adherent coatings.

C. Aggregates shall be tested for gradation by sieve analysis tests in conformance with ASTM C136.

D. When tested for soundness in accordance with ASTM C88, the loss resulting after five cycles shall not exceed 10 percent for fine or coarse aggregate when using either magnesium sulfate or sodium sulfate.

E. When tested in accordance with "Potential Reactivity of Aggregates (Chemical Method)" (ASTM C289), the ratio of silica released to reduction in alkalinity shall not exceed 1.0.

F. When tested in accordance with "Organic Impurities in Sands for Concrete" (ASTM C40), the fine aggregate shall produce a color in the supernatant liquid no darker than the reference standard color solution.

G. When tested in accordance with "Resistance to Abrasion of Small size Coarse Aggregate by Use of the Los Angeles Machine" (ASTM C131), the coarse aggregate shall show a loss not exceeding 42 percent after 500 revolutions, or 10.5 percent after 100 revolutions.

2.0.9. ADMIXTURES

A. Air entraining agent shall be added to all concrete unless noted otherwise. The agent shall provide entrained air in the concrete in accordance with ASTM C260.

B. The following admixtures are required or used for water reduction, slump increase, and/or adjustment of initial set. Admixtures permitted shall confirm to the requirements of ASTM C494. Admixtures shall be non-toxic after 30 days and shall be compatible with and made by the same manufacturer as the air-entraining admixtures.

1. Water reducing admixture shall conform to ASTM C494, Type A and shall contain no more than 0.05% chloride ions. Acceptable products are “Eucon Series” by the Euclid Chemical Company, “Master Pozzolith Series” by BASF, and “Plastocrete Series” by Sika Corporation.

2. High range water reducer shall be sulfonated polymer conforming to ASTM C494, Type F or G. The high range water reducer shall be added to the concrete at either the batch plant or at the job site and may be used in conjunction with a water reducing admixture. The high range water reducer shall be accurately measured and pressure injected into the mixer as a single dose by an experienced technician. A standby system shall be provided and tested prior to each day’s operation of the job site system. Concrete shall be mixed at mixing speed for a minimum of 100 mixer revolutions after the addition of the high range water reducer. Acceptable products are “Eucon 37” or Plastol 5000 by the Euclid Chemical Company, “Master Rheobuild 1000 or Master Glenium Series” by BASF, and “Daracem 100 or Advaflow Series” by W.R. Grace. High range water reducer shall be mandatory for class A1 concrete intended for placement in walls.

3. A non-chloride, non-corrosive accelerating admixture may be used where specifically approved by the City or their designee. The admixture shall conform to ASTM C494, Type C or E, and shall not contain more chloride ions than are present in municipal drinking water. The admixture manufacturer must have longterm noncorrosive test data from an independent testing laboratory (of at least a year’s duration) using an acceptable accelerated corrosion test method such as that using electrical potential measures. Acceptable products are “Accelguard 80/90 or NCA” by the Euclid Chemical Company and “Daraset” by W.R. Grace.

4. A water reducing retarding admixture may be used where specifically approved by the Engineer. The admixture shall conform to ASTM C494, Type D and shall not contain more than 0.05% chloride ions. Acceptable products are “Eucon NR or Eucon Retarder 100” by the Euclid Chemical Company, “Pozzolith Retarder” by BASF, and “Plastiment” by Sika Corporation.

C. Admixtures containing calcium chloride, thiocyanate or more than 0.05 chloride ions are not permitted

C. Portland cement and reinforcing steel: Comply with ACI 301 and, with all modifications and supplements thereto listed in Part 3 of this specifications.

2.0.10. CONCRETE MIX DESIGN

A. The proportions of cement, aggregates, admixtures, and water used in the concrete mixes shall be based on the results of field experience or preferably laboratory trial

mixes in conformance with Section 5.3. "Proportioning on the Basis of Field Experience and/or Trial Mixtures" of ACI 318 and ACI 350. When trial mixes are used, they shall also conform to Article 3.01 of this Section of the Specifications. If field experience records are used, concrete strength results shall be from concrete mixed with all of the ingredients proposed for use on job used in similar proportions to mix proposed for use on job. Contractor shall submit verification confirming this stipulation has been followed. Field experience records and/or trial mix data used as the basis for the proposed concrete mix design shall be submitted to the City or their designee along with the proposed mix.

B. Structural concrete shall conform to the following requirements. Cementitious materials refer to the total combined weight of all cement, fly ash, and slag cement contained in the mix.

1. Compressive Strength (28 day)

CONCRETE CLASS	COMPRESSIVE STRENGTH
Concrete Class A1	4,500 psi (minimum)
Concrete Class A2	4,000 psi (minimum)
Concrete Class B	3,000 psi (minimum)

2. Water/cementitious materials ratio, by weight

CONCRETE CLASS	MAXIMUM	MINIMUM
Concrete Class A1	0.42	0.39
Concrete Class A2	0.45	0.39
Concrete Class B	0.50	0.39

3. Slump Range

a. 4" nominal unless high range water reducing admixture is used.

b. 8” max if high range water reducing admixture is used

4. Air Content

CONCRETE CLASS	COMPRESSIVE STRENGTH
Concrete Class A1, A2	6% ± 1.5%
Concrete Class B	3% Max (non air-entrained)

2.0.11. REINFORCING STEEL

A. Bar reinforcing shall conform to the requirements of ASTM A615 for Grade 60 Billet Steel reinforcing. All reinforcing steel shall be from domestic mills and shall have the manufacturer's mill marking rolled into the bar which shall indicate the producer, size, type, and grade. All reinforcing bars shall be deformed bars. Smooth reinforcing bars shall not be used unless specifically called for on Drawings.

B. Reinforcing supports shall include all necessary chairs, slab bolsters, concrete blocks, tie wires, dips, supports, spacers, and other devices to position reinforcing during concrete placement. Wire bar supports shall be plastic protected (CRSI Class 1).

C. Precast concrete blocks to space and support the reinforcing bars may be used to support and position bottom reinforcing steel. Use concrete blocks with a strength equal to or greater than the concrete in which they are to be placed and have wires cast into them for fastening to the reinforcing bars. Moist-cure the blocks for at least three days.

D. Reinforcing steel shall be accurately positioned as shown on the Drawings and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or plastic protected (CRSI Class 1) metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. Where concrete is to be placed on the ground, supporting concrete blocks (or dobies) shall be used in sufficient numbers to support the reinforcing bars without settlement. In no case shall concrete block supports be continuous.

E. All reinforcement shall be entirely free of rust, scale, grease, or other coating which might destroy or reduce its bond with the concrete.

F. Reinforcing of curbs and gutters shall be in accordance with City of Opa-Locka Public Works Manual Standard Details.

G. Welded wire fabric reinforcing shall conform to the requirements of ASTM A1064. Welded wire fabric shall be 6X6-W1.4xW1.4 steel to be used in all sidewalks and driveways

2.0.12. REINFORCING STEEL

A. Bar reinforcing shall conform to the requirements of ASTM A615 for Grade 60 Billet Steel reinforcing. All reinforcing steel shall be from domestic mills and shall have the manufacturer's mill marking rolled into the bar which shall indicate the producer, size, type, and grade. All reinforcing bars shall be deformed bars. Smooth reinforcing bars shall not be used unless specifically called for on Drawings.

B. Reinforcing supports shall include all necessary chairs, slab bolsters, concrete blocks, tie wires, dips, supports, spacers, and other devices to position reinforcing during concrete placement. Wire bar supports shall be plastic protected (CRSI Class 1).

C. Precast concrete blocks to space and support the reinforcing bars may be used to support and position bottom reinforcing steel. Use concrete blocks with a strength equal to or greater than the concrete in which they are to be placed and have wires cast into them for fastening to the reinforcing bars. Moist-cure the blocks for at least three days.

D. Reinforcing steel shall be accurately positioned as shown on the Drawings and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or plastic protected (CRSI Class 1) metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. Where concrete is to be placed on the ground, supporting concrete blocks (or dobies) shall be used in sufficient numbers to support the reinforcing bars without settlement. In no case shall concrete block supports be continuous.

E. All reinforcement shall be entirely free of rust, scale, grease, or other coating which might destroy or reduce its bond with the concrete.

F. Curbs and gutters shall be in accordance with Miami Dade County or FDOT's Standard Details.

G. Welded wire fabric reinforcing shall conform to the requirements of ASTM A1064. Welded wire fabric shall be 6X6-W1.4xW1.4 steel to be used in all sidewalks and driveways.

2.0.13. FORMS

A. Burlap mats: Conform to AASHTO Specification M182. (Burleen non-staining mats.)

B. Epoxy bonding agent: A two (2) component, solvent free, moisture insensitive structural epoxy adhesive conforming to ASTM C881 Type II, Sikadur 32 Hi-Mod, as manufactured by Sika Corp., Concresive 1090 Liquid by Master Builders or approved equal.

C. Anchor bolts, nuts and washers shall be American made 316 stainless steel.

D. Dovetail slots: Galvanized steel, 22 gauge, 1"x 1", with 5/8" throat, fiber filled.

E. Forms:

1. Plywood Forms: PS-1, B-B Concrete Form, Class I, exterior type, mill oiled and edge sealed. Thickness shall be as required to support concrete at the rate placed, but not less than 3/4".

2. Steel Forms: Uncoated steel, 3/16"-inch minimum thickness, fabricated to close tolerances, protected only by the specified release agent, braced so as not to dent, bend or dimple under wet concrete loads, vibrator impact and tool impact. Maintain steel forms in rust free condition by use of steel wool and light grinding, followed by coats of the specified release agent. Forms should be adjustable to be brought into true alignment without steps or ridges.

F. Form release agent:

1. For plywood forms use a natural non-petroleum base, non-staining and nonretarding release agent that will effectively prevent absorption of moisture and prevent bond with concrete and leaves the concrete with a paintable surface.

2. For steel forms, use an approved material that will not stain, color or otherwise affect the finish of the concrete. Form coating shall not be detectable on finished surfaces.
3. Round column forms: Provide seamless fiber forms with the three plies nearest to the interior surface of the form deckled or scarfed and overlapped to minimize spiral gaps or seams on the column surface.

G. Form Ties: Steel rod type with integral waterstops and cones, and with ends or end fasteners that can be removed without spalling the concrete and which leave a hole equal in depth to the required reinforcement clearance, but not less than 2 inches from the formed face of the concrete. Wire tie, banding wire and wood spreaders will not be permitted.

H. Form Inserts:

1. Bevel or chamfer strips: Wood or non-staining plastic, 3/4" wide on each leg at exposed edges of concrete members, unless otherwise noted on plans.

2. Tongue and Groove Joint Forms: Minimum 24 gauge with steel stakes and splice plates. Forms shall be designed for joints not to receive a poured seal.

3. Pipe hangers and other utility supports: AISI Type 316 stainless steel.

2.0.14. MORTAR

A. Standard premixed mortar conforming to ASTM C387, Type S, or proportion 1 part Portland cement to 2 parts clean, well-graded sand which will pass a 1/8-inch screen. Portland Cement shall conform ASTM C150.

B. Sand shall conform to AASHTO M45.

C. Admixtures may be used not exceeding the following percentages of weight of cement:

1. Hydrated lime: 10 percent

2. Diatomaceous earth or other inert materials: 5 percent.

D. Consistency of mortar shall be such that it will readily adhere to concrete

2.0.15. GROUT

A. Non-Shrink Grout: Non-shrink, non-metallic grout conforming to ASTM C 1107 Grade B or Grade C only. Grout must meet ASTM C 1107 at a temperature range of 50 F to 90 F at a flowable consistency. A minimum compressive strength of 5,000 pounds per square inch (psi) shall be obtained at 28 days.

B. Grout for Surface Repair and Bond Coat:

1. For repair, one part Portland cement to two parts fine sand, and a 50%of water and 50% Acryl 60 or equal (Thoroseal or Acryl Set Bonding Agent by Master Builders) to produce a stiff mortar.

2. For bond coat, one part Portland cement to one part sand, and a 50% of water and 50% Acryl 60 or equal (Thoroseal or Acryl Set Bonding Agent) to produce a slurry mix.

C. Moisture Barrier: Kraft paper and glass reinforcing fibers sandwiched between 2 layers of polyethylene film with a permeance rating of maximum 0.1 as per ASTM E-96, Procedure A.

D. Expansion Joint Filler:

1. Preformed expansion joint filler shall be of the non-extruding and resilient bituminous type and conform to the requirements of AASHTO Designation M 213.

2. Expansion joint filler shall be gray neoprene sponge rubber that conforms to AASHTO Designation M 153, Type I.

Q. Joint Sealant Compound: Non-sag, 2 component, solvent free, moisture insensitive, flexible, epoxy resin conforming to the requirements ASTM C920-87 Type M, Grade NS. Additionally, the sealant must be recommended by the manufacturer to perform under continuous immersion in water.

R. Polyurethane Elastomeric Sealant: Sikaflex-2c, NS/SL or approved equal. Provide a 2- component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a non-sag and self-leveling consistency. Sealant shall meet ASTM C-920 and Federal Specifications TT-S-00227E.

1. Joint Movement: +50%.

S. Waterstops:

1. Polyvinyl chloride (PVC): Conforming to the requirements of U.S. Army Corps of Engineers Specification CRD-C-572 and of the following type:

a. Expansion Joints: 9-inches by 3/8-inch, ribbed center bulb.

b. Construction Joint: 9-inches by 3/8-inch, flat ribbed.

c. Only where specified on plans at construction and expansion joints: 9-inches by 3/8-inch, split ribbed.

2. Thermoplastic butt splices shall be performed using approved prefabricated pretested fittings; do not lap splice waterstops.

3. Waterstops for impermeable joints between prefabricated structures Non-hydro expansive based on bituminous resins to seal horizontal and vertical joints; hydrostatic load resistance 7 m column of water; not soluble in water; flashpoint 315degree Celsius ASTM D92; elongation capacity at 20 degree Celsius 230% compared to its initial dimension. Suitable for tunnels, water treatment plants, sewage, septic tanks, tanks, pipelines, sewer trunk lines and for any prefabricated concrete structure in general.

T. Fiber Reinforcement: Fiber reinforcement shall not be used in the concrete unless ordered buy the Engineer in writing. It shall consist of 100% virgin polypropylene fibrillated fiber dosage of 2 lbs. per cubic foot.

1. Compressive Strength: 1 psi (.006895 M Pa), ASTM C-39.

2. Flexural Strength: 288 psi (2.0 M Pa) after 7 days, 390 psi (2.7 M Pa) after 28 days; ASTM C-78.

3. Splitting Tensile Strength: 194 psi (1.3 M Pa) after 7 days, and 290 psi (2.0 M Pa) after 28 days; ASTM C-496.

4. Source: Fiber mesh Micro-Reinforcement System by Fiber mesh Company, Division of Synthetic Industries, Inc. Or approved equal.

U. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Engineer.

V. A shrinkage reducing admixture (Teraguard) or equivalent at the rate of 2.2% by weight of cement may be used in the concrete to meet the shrinkage limitations.

W. To protect the concrete slab against the elements, the Engineer may direct the Contractor to spray an evaporation retarder on the finished concrete slab immediately behind the cement finishing process at no additional cost to the City. This is not a curing compound.

PART 3 – EXECUTION 3.0.1.

READY MIX CONCRETE

A. Concrete obtained from a ready-mix plant shall conform to the requirements of these Specifications, and all applicable portions of ASTM C94 "Ready-Mixed Concrete".

3.0.2. MIXING AND DELIVERING CONCRETE

D. Produce a completely uniform mixed concrete in a truck mixer for 70 to 100 revolutions at the mixing speed designated by the truck manufacturer.

E. Prior to starting the discharge of the concrete at the jobsite, when water is added, record the added quantity and mix the concrete 30 additional drum mixing revolutions. Do not make more than two mix adjustments. Seek approval from the Engineer prior to using a central mixer and depositing the batch into a truck mixer.

F. Transit Time Using Agitator Trucks: The maximum allowable transit time between the initial introduction of water into the mix and completely discharging all the concrete from the truck will be 60 minutes. The maximum transit time can be 90 minutes if water reducing and retarding admixture (Type D, Type G, or Type II) is used. Reject concrete exceeding the maximum transit time.

G. All the concrete in a load must be in its final placement position a maximum of 15 minutes after the transit time has expired unless a time extension is approved by the Engineer.

H. Adding Water to Concrete at the Placement Site: Water may be added at the placement site provided the addition of water does not exceed the water to cementitious materials ratio as defined by the mix design. After adding water, perform a slump test to confirm the concrete is within the slump tolerance range stated in Section 2.01. If the slump is outside the tolerance range, reject the load. If an adjustment is made at the concrete production facility, perform a slump test on the next load to ensure the concrete is within the slump tolerance range. Do not place concrete represented by slump test results outside of the tolerance range. Include water missing from the water storage tanks upon arrival at the project site in the jobsite water added

3.0.3. PLACING CONCRETE

B. Weather Restrictions

1. Concreting in Cold Weather: Do not place concrete when the air temperature at placement is below 40ºF. The requirements of concreting in cold weather do not apply to precast concrete mixing and placement operations occurring in a temperature-controlled environment.

2. Concreting in Hot Weather: Hot weather concreting is defined as the production, placing, and curing of concrete when the concrete temperature at placing exceeds 85ºF but is less than 100ºF . Unless the specified hot weather concreting measures are in effect, reject concrete exceeding 85ºF at the time of placement. Concrete temperature shall be measured per ASTM C1064. Regardless of special measures taken, reject concrete exceeding 100ºF. Predict the concrete temperatures at placement time and implement hot weather measures to avoid production shutdown.

B. Inspections Before Placing Concrete: Do not place concrete until the depth and character of the foundation and the adequacy of the forms and falsework have been approved by the Engineer. Do not deposit any concrete until all reinforcement is in place and has been inspected and approved by the Engineer.

C. Exposure to Water: Do not expose concrete other than seal concrete in cofferdams to the action of water before final setting. Do not expose such concrete to the action of salt or brackish water for a period of seven days after placing the concrete. Protect the concrete during this period by keeping salt or brackish water pumped out of cofferdams.

D. Deposit concrete as nearly as possible in its final position. Do not deposit large quantities at one point and then run or work it along the forms. Take special care to fill each part of the forms, to work coarse aggregate back from the face, and to force concrete under and around reinforcing bars without displacing them.

E. Use a method and manner of placing concrete that avoids the possibility of segregation or separation of aggregates. If the Engineer determines that the quality of concrete as it reaches its final position is unsatisfactory, remove it and discontinue or adjust the method of placing until the Engineer determines that the quality of the concrete as placed is satisfactory.

F. Use metal or metal-lined open troughs, chutes, or other means of concrete conveyance which have no aluminum parts in contact with the concrete. As an exception, chutes made of aluminum for ready mixed concrete trucks, no longer than 20 feet, may be used. This exception does not apply to any other means of concrete conveyance. Where steep slopes are required, use chutes that are equipped with baffles or are in short lengths that reverse the direction of movement. Where placing operations would involve dropping the concrete freely more than 5 feet, deposit it through pipes, troughs, or chutes of sheet metal or other approved material. Use troughs, chutes, or pipes with a combined length of more than 30 feet only with the City''s authorization. Keep all troughs, chutes, and pipes clean and free from coatings of hardened concrete by thoroughly flushing them with water after each run or more often if necessary.

G. Place concrete against supporting material that is moist at the time of concrete placement. If additional water is required, uniformly apply it ahead of the concrete placement as directed by the Engineer. The Contractor may use a moisture barrier in lieu of controlling the foundation grade moisture when approved by the Engineer.

H. Place concrete in continuous horizontal layers, approximately 20 inches thick. To avoid obtaining a plane of separation or a cold joint between layers, vibrate the concrete.

I. Vibrate concrete to avoid honeycomb and voids, especially at construction joints, expansion joints, valleys, and ends of form sheets. Use approved pouring sequences.

J. Do not use calcium chloride or any other admixture containing chloride salts in the concrete.

K. The concrete shall be placed on stabilizing or compacted subgrade to such depth that, when it is consolidated and finished, the slab thickness required by the Drawings will be obtained at all points and surface will at no point be below the grade specified for the finished surface, after application of the allowable tolerance. The concrete shall be deposited on the stabilized subgrade in a manner which will require as little re-handling as possible. Placing of the concrete shall be continuous between transverse joints, without the use of intermediate bulkheads.

L. Concrete shall be thoroughly consolidated against and along the faces of all forms, and along the full length and on both sides of all joint assemblies, by means of hand operated, vibrators. Vibrators shall not be permitted to come in contact with joint assembly, the subgrade, or a side form. Vibration at any one location shall not continue so long as to produce puddling or the accumulation of excessive grout on the surface. In no case shall the vibrator be operated longer than 15 seconds in any one location.

M. Coloring of concrete shall be done by dry-mixing the compound and broadcasting over the fresh-poured concrete after it has been struck off.

N. Placing of concrete shall be so regulated that the pressure caused by the wet concrete shall not exceed that used in the design of the forms.

O. All concrete for walls shall be placed through openings in the form spaced at frequent intervals or through tremies (heavy duct canvas, rubber, etc.), equipped with suitable hopper heads. Tremies shall be of variable lengths so the free fall shall not exceed five (5) feet and a sufficient number shall be placed in the form to ensure the concrete is kept level at all times.

P. When forms are removed, surfaces shall be even and dense, free from aggregate pockets or honeycomb. To achieve this, concrete shall be consolidated using mechanical vibration, supplemented by forking and spading by hand in the corners and angle of forms and along form surfaces while the concrete is plastic under the vibratory action. Consolidation shall conform to ACI 309.

Q. Care shall be taken to prevent cold joints when placing concrete in any portion of the work. The concrete placing rate shall be such as to ensure that each layer is placed while the previous layer is soft or plastic, so that the two layers can be made monolithic by penetration of the vibrators. Maximum thickness of concrete layers shall be 18 inches. The surface of the concrete shall be level whenever a run of concrete is stopped.

R. Placement in Wall Forms: Concrete shall not be dropped through reinforcement steel or into any deep form, whether reinforcement is present or not, causing separation of the coarse aggregate from the mortar on account of repeatedly hitting rods or the sides of the form as it falls, nor shall concrete be placed in any form in such a manner as to leave accumulation of mortar on the form surfaces above the placed concrete. In such cases, some means such as the use of hoppers and, if necessary, vertical ducts of canvas, rubber, or metal shall be used for placing concrete in the forms in a manner that it may reach the place of final deposit without separation. In no case shall the free fall of concrete exceed 4 feet below the ends of ducts, chutes, or buggies. Concrete shall be uniformly distributed during the process of depositing, and in no case after depositing shall any portion be displaced in the forms more than 6 feet in horizontal direction. Concrete in forms shall be deposited in uniform horizontal layers not deeper

than 2 feet; and care shall be taken to avoid inclined layers or inclined construction joints where such are required for sloping members. Each layer shall be placed while the previous layer is still soft. The rate of placing concrete in forms shall not exceed 5 feet of vertical rise per hour.

3.0.4. FORMWORK

A. Forms to confine the concrete and shape it to the required lines shall be used wherever necessary. The Contractor shall assume full responsibility for the adequate design of all forms, and any forms which are unsafe or inadequate in any respect shall promptly be removed and replaced at the Contractor 's expense. All design, construction, maintenance, preparation, and removal of forms shall be in accordance with the FBC, ACI 347 and the requirements specified herein.

B. All forms shall be true in every respect to the required shape and size, shall conform to the established alignment and grade, and shall be of sufficient strength and rigidity to maintain their position and shape under the loads and operations incident to placing and vibrating the concrete.

C. Vertical Surfaces: All vertical surfaces of concrete members shall be formed, except where placement of the concrete against the ground is called for by the Engineer.

D. Construction Joints: Concrete construction joints will not be permitted at locations other than those shown or specified, except as may be acceptable to the Engineer. When a second lift is placed on hardened concrete, special precautions shall be taken in the way of the number, location, and tightening of ties at the top of the old lift and bottom of the new to prevent any unsatisfactory effect whatsoever on the concrete.

E. Form Ties: Wire ties for holding forms will not be permitted. No form-tying device or part thereof, other than metal, shall be left embedded in the concrete. Ties shall not be removed in such manner as to leave a hole extending through the interior of the concrete members. The use of snap-ties which cause spilling of the concrete upon form stripping or tie removal will not be permitted. If steel panel forms are used, rubber grommets shall be provided where the ties pass through the form in order to prevent loss of cement paste. Where metal rods extending through the concrete are used to support or to strengthen forms, the rods shall remain embedded and shall terminate not less than 1 inch back from the formed face or faces of the concrete.

F. Careful procedures for the removal of forms shall be strictly followed, and this work shall be done with care so as to avoid injury to the concrete. No heavy loading on green concrete will be permitted. Members which must support their own weight shall not have their forms removed until they have attained at least 75 percent of the 28day strength of the concrete as specified herein. Forms for all vertical walls and columns shall remain in place at least 2 days after the concrete has been placed. Forms for all

parts of the Work not specifically mentioned herein shall remain in place for periods of time as determined by the City or their designee.

3.0.5. REINFORCING STEEL

A. Reinforcing steel shall be accurately formed to the dimensions and shapes shown on the Drawings, and the fabricating details shall be prepared in accordance with ACI 315 and ACI 318, except as modified by the Drawings.

B. Bending or Straightening: Reinforcement shall not be straightened or rebent in a manner which will injure the material. Bars with kinks or bends not shown shall not be used. All bars shall be bent cold, unless otherwise permitted by the Engineer. No bars partially embedded in concrete shall be field-bent except as shown or specifically permitted by the Engineer.

C. Reinforcing steel shall be accurately positioned as shown on the Drawings and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. Where concrete is to be placed on the ground, supporting concrete blocks (or dobies) shall be used, in sufficient numbers to support the bars without settlement, but in no case shall such support be continuous. All concrete blocks used to support reinforcing steel shall be tied to the steel with wire ties which are embedded in the blocks. For concrete over formwork, the Contractor shall furnish concrete, metal, plastic, or other acceptable bar chairs and spacers.

D. The portions of all accessories in contact with the formwork shall be made of concrete, plastic, or steel coated with a 1/8-inch minimum thickness of plastic which extends at least 1/2 inch from the concrete surface. Plastic shall be gray in color.

E. Tie wires shall be bent away from the forms in order to provide the specified concrete coverage.

F. Bars additional to those shown which may be found necessary or desirable by the Contractor for the purpose of securing reinforcement in position shall be provided by the Contractor at its own expense.

G. Reinforcement placing tolerances shall be within the limits specified in ACI 318, unless otherwise directed by the Engineer.

H. Welded wire fabric reinforcement placed over horizontal forms shall be supported on slab bolsters having gray, plastic-coated standard type legs as specified herein. Slab bolsters shall be spaced not less than 30 inches on centers, shall extend continuously

across the entire width of the reinforcing mat, and shall support the reinforcing mat in the plane shown.

I. Welded wire fabric placed over the ground shall be supported on wired concrete blocks (dobies) spaced not more than 3 feet on centers in any direction. The construction practice of placing welded wire fabric on the ground and hooking into place in the freshly placed concrete shall not be used.

J. Reinforcement bar splices shall only be used at locations shown. When it is necessary to splice reinforcement at points other than where shown, the character of the splice shall be as acceptable to the City or their designee.

K. Lap length for reinforcement bars shall be in a Class B Splice in accordance with ACI 318, unless otherwise shown. Laps of welded wire fabric shall be in accordance with the ACI 318.

L. Reinforcing steel shall at all times be protected from conditions conducive to corrosion until concrete is placed around it.

M. The surfaces of all reinforcing steel and other metalwork to be in contact with concrete shall be thoroughly cleaned of all dirt, grease, loose scale and rust, grout, mortar, and other foreign substances immediately before the concrete is placed. Where there is a delay in depositing concrete, reinforcing shall be reinspected and, if necessary, recleaned.

3.0.6. PREPARATION OF SURFACES FOR CONCRETING

A. General: No concrete shall be placed until the reinforcement steel and formwork have been erected in a manner acceptable to the City or their designee. The Contractor shall notify the City or their designee not less than two working days prior to concrete placement, allowing for inspection and any corrective measures which are required. Earth surfaces shall be thoroughly wetted by sprinkling, prior to the placing of any concrete, and these surfaces shall be kept moist by frequent sprinkling up to the time of placing concrete thereon. The surface shall be free from standing water, mud, and debris at the time of placing concrete.

B. Joints in Concrete: Concrete surfaces upon or against which concrete is to be placed, where the placement of the old concrete has been stopped or interrupted so that, as determined by the City or their designee, the new concrete cannot be incorporated integrally with that previously placed, are defined as construction joints. The surfaces of horizontal joints shall be given a compacted, roughened surface for good bond. Except where the Drawings call for joint surfaces to be coated, the joint surfaces shall be cleaned of all laitance, loose or defective concrete, and foreign material. Such cleaning shall be accomplished by sandblasting, followed by thorough washing. All

pools of water shall be removed from the surface of construction joints before the new concrete is placed.

C. Existing concrete surfaces upon or against which concrete is to be placed shall be given a roughened surface for good bond. Joint surfaces shall be cleaned of all laitance, loose or defective concrete, and foreign material. Such cleaning shall be accomplished by Thydroblasting. All pools of water shall be removed from the surface of construction joints before the new concrete is placed.

D. Placing Interruptions: When placing of concrete is to be interrupted long enough for the concrete to take a set, the working face shall be given a shape by the use of forms or other means that will secure proper union with subsequent work, provided that construction joints shall be made only where acceptable to the City or their designee.

E. Embedded Items: No concrete shall be placed until all formwork, installation of parts to - be embedded, reinforcement steel, and preparation of surfaces involved in the placing have been completed and accepted by the City or their designee at least 4 hours before placement of concrete. All surfaces of forms and embedded items that have become encrusted with dried grout from concrete previously placed shall be cleaned of all such grout before the surrounding or adjacent concrete is placed.

F. All reinforcement, anchor bolts, sleeves, inserts, and similar items shall be set and secured in the forms where shown on the Drawings or by shop drawings and shall be acceptable to the City or their designee before any concrete is placed. Accuracy of placement is the responsibility of the City or their designee.

G. Casting Against Old Concrete: Where concrete is to be cast against old concrete (any concrete which is greater than 60 days of age), the surface of the old concrete shall be thoroughly cleaned and roughened by hydro-blasting (exposing aggregate) prior to the application of an epoxy bonding agent. Application shall be according to the bonding agent manufacturer's instructions and recommendations.

H. No concrete shall be placed in any structure until all water entering the space to be filled with concrete has been properly cut off or has been diverted by pipes, or other means, and carried out of the forms, clear of the work. No concrete shall be deposited under water nor shall the Contractor allow still water to rise on any concrete until the concrete has attained its initial set. Water shall not be permitted to flow over the surface of any concrete in such manner and at such velocity as will injure the surface finish of the concrete.

I. Openings for pipes, inserts for pipe hangers and brackets, and the setting of anchors shall, where practicable, be provided for during the placing of concrete.

J. Corrosion Protection: Pipe, conduit, dowels, and other ferrous items required to be embedded in concrete construction shall be so positioned and supported prior to

placement of concrete that there will be a minimum of 2 inches clearance between said items, and any part of the concrete reinforcement will not be permitted.

K. Cleaning: The surfaces of all metalwork to be in contact with concrete shall be thoroughly cleaned of all dirt, grease, loose scale and rust, grout, mortar, and other foreign substances immediately before the concrete is placed.

3.0.7. TAMPING AND VIBRATING

A. As concrete is placed in the forms or in excavations, it shall be thoroughly settled and compacted, throughout the entire depth of the layer which is being consolidated, into a dense homogeneous mass, filling all comers and angles, thoroughly embedding the reinforcement, eliminating rock pockets, and bringing only a slight excess of water to the exposed surface of concrete during placement. Vibrators shall be high speed power vibrators (8,000 or 10,000 rpm) of an immersion type in sufficient number and with (at least one) standby units as required.

B. Concrete in walls shall be internally vibrated and at the same time rammed, stirred, or worked with suitable appliances, tamping bars, shovels, or forked tools until it completely fills the forms or excavations and closes snugly against all surfaces. Subsequent layers of concrete shall not be placed until the layers previously placed have been worked thoroughly as specified. Vibrators shall be provided in sufficient numbers, with standby units as required, to accomplish the results herein specified with 15 minutes after concrete of the prescribed consistency is placed in the forms. The vibrating head shall be kept from contact with the surfaces of the forms. Care shall be taken not to vibrate concrete excessively or to work it in any manner that causes segregation of its constituents.

3.0.8. FINISHING CONCRETE SURFACE

A. General: Surfaces shall be free from fins, bulges, ridges, offsets, honeycombing, or roughness of any kind, and shall present a finished, smooth, continuous hard surface. Allowable deviations from plumb or level and from the alignment, profiles, and dimensions shown on the Drawings are defined as tolerances and are specified herein. These tolerances are to be distinguished from irregularities in finish as described herein. Aluminum finishing tools shall not be used.

B. Formed Surfaces: After removal of forms, the finishes described below shall be applied in accordance with Article 3.13, D. Unless the finish schedule specifies otherwise, all surfaces shall receive at least a Type I finish. The Engineer shall be the sole judge of acceptability of all concrete finish work.

1. Type I - Rough: All fins, burrs and other projections left by the forms shall be removed. All holes left by removal of ends of ties, and all other holes, depressions, or voids shall be filled solid with cement grout after first being thoroughly wetted.

Honeycombs shall be chipped back to solid concrete as directed, prior to patching with cement grout. Holes shall be filled with a small tool that will permit packing the hole solidly with cement grout. Cement grout shall consist of one part cement to three parts sand, and the amount of mixing water shall be as little as consistent with the requirements of handling and placing. Color of cement grout shall match the adjacent wall surface. At locations where concrete coatings are specified to be applied, epoxy-based patch material or filler surfaces compatible with the coating shall be used in lieu of cement grout specified herein. Concrete finish shall be in strict conformance to the coating / paint manufacturer's recommendations.

2. Type II - Grout Cleaned: Where this finish is required, it shall be applied after completion of Type I finish. After the concrete has been predampened, slurry consisting of one part cement (including an appropriate quantity of white cement in order to produce a color matching the surrounding concrete) and 1-1/2 parts sand passing the No. 16 sieve, by damp loose volume, shall be spread over the surface with clean burlap pads or sponge rubber floats. Any surplus shall be removed by scraping and then rubbing with clean burlap. The finish shall be kept damp for at least 36 hours after application.

3. Type III - Smooth Rubbed: Where this finish is required, it shall be applied after the completion of the Type I finish. No rubbing shall be done before the concrete is thoroughly hardened and the mortar used for patching is firmly set. A smooth, uniform surface shall be obtained by wetting the surface and rubbing it with a carborundum stone to eliminate irregularities. Unless the nature of the irregularities requires it, the general surface of the concrete shall not be cut into. Corners and edges shall be slightly rounded by the use of the carborundum stone. Brush finishing or painting with grout or neat cement will not be permitted.

C. Unformed Surfaces: The finishes described below shall be applied to unformed surfaces such as floors, slabs, flow channels and top of walls in accordance with Article 3.05 - Concrete Finish Schedule. The Engineer shall be the sole judge of acceptability of all such finish work.

1. Type "A" - Screeded: This finish shall be obtained by placing screeds at frequent intervals and striking off to the surface elevation required. When a Type "F" finish is subsequently to be applied, the surface of the screeded concrete shall be roughened with a concrete rake to ½" minimum deep grooves prior to final set.

2. Type "B" - Wood Floated: This finish shall be obtained after completion of a Type "A" finish by working a previously screeded surface with a wood float until the desired texture is reached. Floating shall begin when the water sheen has disappeared and when the concrete has sufficiently hardened so that a person's foot leaves only a slight imprint. If wet spots occur, water shall be removed with a squeegee. Care shall be taken to prevent the formation of laitance and excess water on the finished surface. The finished surface shall be true, even, and free from blemishes and other irregularities.

3. Type "C" - Cork Floated: This finish shall be similar to Type "B" but slightly smoother than that obtained with a wood float. It shall be obtained by power or band floating with cork floats.

4. Type "D" - Steel Troweled: This finish shall be obtained after completion of a Type "B" finish. When the concrete has hardened sufficiently to prevent excess fine material from working to the surface, the surface shall be compacted and smoothed with not less than two thorough and complete steel troweling operations. In areas, which are to receive a floor covering such as tile, resilient flooring, or carpeting, only one troweling operation is required. The finish shall be brought to a smooth, dense surface, free from defects and blemishes.

5. Type "E" - Broom or Belt: This finish shall provide the surface with a transverse scored texture by drawing a broom or burlap belt across the surface immediately after completion of a Type "B" finish.

6. Type "F" - Swept in Grout Topping: This finish shall be applied after a completion of a Type "A" finish. The concrete surface shall be properly cleaned, washed, and coated with a mixture of water and Portland Cement. Cement grout in accordance with Section 03315 shall then be plowed and swept into neat conformance with the blades or arms of the apparatus by turning or rotating the previously positioned mechanical equipment. Special attention shall be paid to true grades, shapes and tolerances as specified by the manufacturer of the equipment. Before beginning this finish, the Contractor shall notify the Engineer and the equipment manufacturer of the details of the operation and obtain approval and recommendations of the equipment manufacturer.

7. Type "G" - Hardened Finish: Either a liquid hardened finish or an aggregate hardened finish shall be provided at the Contractor's option.

8. Type "H" - Non-Slip Finish: This finish shall be provided by applying a non-slip shake-on aggregate concurrently with the application of a Type "D" finish. Application procedure shall be in accordance with manufacturer's instructions.

9. Type "J" - Raked Finish: This finish shall be provided by raking the surface as soon as the condition of the concrete permits by making depressions of +/-1/4-inch.

3.0.9. CONCRETE FINISH SCHEDULE

ITEM	TYPE OF FINISH

Inner face of walls of tanks, flow channels, wet wells, perimeter walls, and miscellaneous structures to be coated	I
Exterior concrete walls below grade	I
Exterior exposed concrete walls and columns (including top of wall) to one foot below grade. All other exposed concrete surfaces not specified elsewhere	II
All interior exposed concrete vertical surfaces in buildings	III
Interior exposed ceiling, including beams	III
Floors of process equipment tanks or basins, and slabs to receive roofing material or waterproof membranes	B

All interior finish floors of buildings and structures and walking surfaces which will be continuously or intermittently wet	C
All interior finish floors of buildings and structures which are not continuously or intermittently wet	D
Floors to receive tile, resilient flooring, or carpeting	D
Concrete in flow channels not specified to be coated	D
Exterior concrete sidewalks, steps, ramps, decks, slabs on grade and landings exposed to weather	E
Floors of process tanks indicated on Drawings or in the specifications to receive cement grout topping	F
Precast concrete form panels, hollow core planks, double tees	J

3.0.10. CURING AND DAMP PROOFING

A. All concrete shall be cured for not less than 14 days after placing, in accordance with the methods specified herein for the different parts of the work and described in detail in the following paragraphs.

SURFACE TO BE CURED OR DAMPPROOFED	METHOD
Unstripped forms	1
Construction joints between footings and walls, and between floor slab and columns	2
Encasement concrete and thrust blocks	3
All concrete surfaces not specifically provided elsewhere in this paragraph	4

B. Method 1: Wooden forms shall be wetted immediately after concrete has been placed and shall be kept wet with water until removed. If steel forms are used, the exposed concrete surfaces shall be kept continuously wet until the forms are removed. If forms are removed within 14 days of placing the concrete, curing shall be continued in accordance with Method 4.

C. Method 2: The surface shall be covered With burlap mats which shall be kept wet with water for the duration of the curing period, until the concrete in the walls has been placed. No curing compound shall be applied to surfaces cured under Method 2.

D. Method 3: The surface shall be covered with moist earth not less than 4 hours, nor more than 24 hours, after the concrete is placed. Earthwork operations that may damage the concrete shall not begin until at least 7 days after placement of concrete.

E. Method 4: The surface shall be sprayed with a liquid curing compound. It shall be applied in accordance with the manufacturers printed instructions at a maximum coverage rate of 200 square feet per gallon and in such a manner as to cover the surface with a uniform film which will seal thoroughly.

F. Care shall be exercised to avoid damage to the seal during the curing period. Should the seal be damaged or broken before the expiration of the curing period, the break shall be repaired immediately by the application of additional curing compound over the damaged portion.

G. Wherever curing compound may have been applied by mistake to faces against which concrete subsequently is to be placed and to which it is to adhere, said compound shall be entirely removed by hydroblasting just prior to the placing of new concrete.

H. Curing compound shall be applied as soon as the concrete has hardened enough to prevent marring on uniformed surfaces, and within 2 hours after removal of forms from contact with formed surfaces. Repairs required to be made to formed surfaces shall be made within the said 2-hour period; provided, however, that any such repairs which cannot be made within the said 2-hour period shall be delayed until after the curing compound has been applied. When repairs are to be made to an area on which curing compound has been applied, the area involved shall first be wet-sand blasted to remove the curing compound, following which repairs shall be made as provided herein.

3.0.11. TESTING

A. Field Testing of Concrete

1. The Contractor shall coordinate with the Engineer's project representative the onsite scheduling of the materials testing consultant personnel as required for concrete testing.

2. Concrete for testing shall be supplied by the Contractor at no additional cost to the Owner, and the Contractor shall provide assistance to the materials testing consultant in obtaining samples. The Contractor shall dispose of and clean up all excess material.

C. Consistency

1. The consistency of the concrete will be checked by the materials testing consultant by standard slump cone tests. The Contractor shall make any necessary adjustments in the mix as the Engineer and/or the materials testing consultant may direct and shall upon written order suspend all placing operations in the event the consistency does not meet the intent of the specifications. No payment shall be made for any delays, material, or labor costs due to such eventualities.

2. Slump tests shall be made in accordance with ASTM C143. Slump tests will be performed as deemed necessary by the materials testing consultant and each time compressive strength samples are taken.

3. Concrete with a specified nominal slump shall be placed having a slump within 1" (higher or lower) of the specified slump. Concrete with a specified maximum slump shall be placed having a slump less than the specified slump.

D. Unit Weight

1. Samples of freshly mixed concrete shall be tested for unit weight by the materials testing consultant in accordance with ASTM C138.

2. Unit weight tests will be performed as deemed necessary by the Engineer and each time compressive strength samples are taken.

E. Air Content

1. Samples of freshly mixed concrete will be tested for entrained air content by the materials testing consultant in accordance with ASTM C231.

2. Air content tests will be performed as deemed necessary by the materials testing consultant and each time compressive strength samples are taken.

3. In the event test results are outside the limits specified, additional testing shall occur. Admixture quantity adjustments shall be made immediately upon discovery of incorrect air entrainment.

F. Compressive Strength

1. Samples of freshly mixed concrete will be taken by the materials testing consultant and tested for compressive strength in accordance with ASTM C172, C31 and C39, except as modified herein.

2. In general, one sampling shall be taken for each placement, with a minimum of one (1) sampling for each day of concrete placement operations, or for each one

fifty (50) cubic yards of concrete, or for each 5,000 square feet of surface area for slabs or walls, whichever is greater.

3. Each sampling shall consist of at least five (5) 6x12 cylinders or eight (8) 4x8 cylinders. Each cylinder shall be identified by a tag, which shall be hooked or wired to the side of the container. The materials testing consultant will fill out the required information on the tag, and the Contractor shall satisfy himself that such information shown is correct.

4. The Contractor shall be required to furnish labor to the Owner for assisting in preparing test cylinders for testing. The Contractor shall provide approved curing boxes for storage of cylinders on site. The insulated curing box shall be of sufficient size and strength to contain all the specimens made in any four consecutive working days and to protect the specimens from falling over, being jarred or otherwise disturbed during the period of initial curing. The box shall be erected, furnished, and maintained by the Contractor. Such box shall be equipped to provide the moisture and to regulate the temperature necessary to maintain the proper curing conditions required by ASTM C31. Such box shall be located in an area free from vibration such as pile driving and traffic of all kinds and such that all specimens are shielded from direct sunlight and/or radiant heating sources. No concrete requiring inspection shall be delivered to the site until such storage curing box has been provided. Specimens shall remain undisturbed in the curing box until ready for delivery to the testing laboratory but not less than sixteen hours.

5. The Contractor shall be responsible for maintaining the temperatures of the curing box during the initial curing of test specimens with the temperature preserved between 60°F and 80°F as measured by a maximum-minimum thermometer. The Contractor shall maintain a written record of curing box temperatures for each day curing box contains test specimens. Temperature shall be recorded a minimum of three times a day with one recording at the start of the workday and one recording at the end of the workday.

6. When transported, the cylinders shall not be thrown, dropped, allowed to roll, or be damaged in any way.

7. Compression tests shall be performed in accordance with ASTM C39. For 6x12 cylinders, two test cylinders will be tested at seven days and two at 28 days. For 4x8 cylinders, three test cylinders will be tested at seven days, three at 28 days. The remaining cylinders will be held to verify test results, if needed.

G. Evaluation and Acceptance of Concrete

1. Evaluation and acceptance of the compressive strength of concrete shall be according to the requirements of ACI 214, ACI 318, and ACI 350.

2. The strength level of concrete will be considered satisfactory if all of the following conditions are satisfied.

    a. Every arithmetic average of any three consecutive strength tests equals or exceeds the minimum specified 28-day compressive strength for the mix (see Article 2.08). b. No individual compressive strength test results falls below the minimum specified strength by more than 500 psi.

3. In the event any of the conditions listed above are not met, the mix proportions shall be corrected for the next concrete placing operation.

4. In the event that condition 2B is not met, additional tests in accordance with Article 3.10, paragraph H shall be performed.

5. When a ratio between 7-day and 28-day strengths has been established by these tests, the 7-day strengths shall subsequently be taken as a preliminary indication of the 28-day strengths. Should the 7-day test strength from any sampling be more than 10% below the established minimum strength, the Contractor shall:

    a. Immediately provide additional periods of curing in the affected area from which the deficient test cylinders were taken.

    b. Maintain or add temporary structural support as required.

    c. Correct the mix for the next concrete placement operation, if required to remedy the situation.

6. All concrete which fails to meet the ACI requirements and these specifications is subject to removal and replacement at no additional cost to the Owner.

H. When non-compliant concrete is identified, test reports shall be sent immediately to the Engineer for review.

I. Additional Tests

1. When ordered by the Engineer, additional tests on in-place concrete shall be provided and paid for by the Contractor.

2. In the event the 28-day test cylinders fail to meet the minimum strength requirements as outlined in Article 3.10, paragraph F, the Contractor shall have concrete core specimens obtained and tested from the affected area immediately.

    a. Three cores shall be taken for each sample in which the strength requirements were not met.

b. The drilled cores shall be obtained and tested in conformance with ASTM C42. The tests shall be conducted by a materials testing consultant approved by the Engineer.

c. The location from which each core is taken shall be approved by the Engineer. Each core specimen shall be located, when possible, so its axis is perpendicular to the concrete surface and not near formed joints or obvious edges of a unit of deposit.

d. The core specimens shall be taken, if possible, so no reinforcing steel is within the confines of the core.

e. The diameter of core specimens should be at least 3 times the maximum nominal size of the coarse aggregate used in the concrete but must be at least 2-inches in diameter.

f. The length of specimen, when capped, shall be at least twice the diameter of the specimen.

g. The core specimens shall be taken to the laboratory and when transported, shall not be thrown, dropped, allowed to roll, or damaged in any way.

h. Two (2) copies of test results shall be mailed directly to the Engineer. The concrete in question will be considered acceptable if the average compressive strength of a minimum of three test core specimens taken from a given area equal or exceed 85% of the specified 28-day strength and if the lowest core strength is greater than 75% of the specified 28-day strength.

J. In the event that concrete placed by the Contractor is suspected of not having proper air content, the Contractor shall engage a materials testing consultant approved by the Engineer, to obtain and test samples for air content in accordance with ASTM Specification C457. D

END OF SECTION

03360 GROUT

PART 1 – GENERAL 1.0.1.

SCOPE OF WORK

A. The work included in this Section consists of grouting the various items listed hereinafter and indicated on the drawings.

1.0.2. RELATED WORK

A. Section 03300 “Cast-in-Place Concrete, Reinforcement and Formwork”.

1.0.3. SUBMITTALS

A. Manufacturer's literature shall be submitted for review on the following items.

1. Nonshrink grout data shall include grout properties, mixing, surface preparation and installation instructions.

1.0.4. DELIVERY AND STORAGE

A. Grouting materials shall be delivered and stored in unbroken containers with seals and labels intact as packaged by the manufacturer.

1.0.5. QUALITY ASSURANCE

A. If the project includes patching, through bolt holes, epoxy anchors, and/or block outs, the manufacturer shall, if necessary, train the Contractor's employees in the mixing and curing of the epoxy grouts for each of these applications.

B. Furnish one year warranty. Manufacturer's warranty shall not contain a disclaimer limiting responsibility to the purchase price of products or materials.

PART 2 – PRODUCTS 3.0.1.

MATERIALS

A. Cementitious grout shall be composed of one part of Type II Portland cement to three parts of sand.

B. Non-shrink Nonmetallic Grout shall be Five Star Special Grout 150, Five Star Products, Inc.; Grout F-100, Sauereisen Cement; Masterflow 713, BASF Building Systems; NS Grout, Euclid Chemical Company, pre-mixed type, or approved equal.

C. Non-shrink Metallic Grout: Master Builders Embeco 636 Plus Grout, BASF Building Systems, pre-mixed type, or approved equal.

D. Non-shrink Hydraulic Cement Grout shall be Waterplug, Thoro Products, BASF Building Systems, or approved equal.

E. Non-shrink shall be Five Star HP Epoxy Grout, Five Star Products, Inc., available from Coastal Construction Products, Inc. or Wall-Nu Trowelable, Steelcote Manufacturing Co., available from Florida Wire and Rigging Works, or approved equal.

F. Specifications for cement and sand for mortar and grout shall be the same as those for concrete.

3.0.2. EPOXY ANCHOR GROUT

A. Epoxy anchor grout shall conform to ASTM C 881 - Epoxy-Resin-Base Bonding Systems for Concrete, Type IV, Class A, B and C, Grade 3 with the exception of gel time.

B. Heat deflection temperature per ASTM D 648 -- Test Method for Deflection Temperature of Plastics Under Flexural Load shall be a minimum 120 degrees.

C. Manufacturer shall certify that the epoxy anchor grout will maintain 90 percent of its strength up to a temperature of 125 degrees F.

D. Grout shall come in a 2 chambered cartridge with a metering system that provides the proper ratio of hardener and resin. The grout shall also come with a static mixer nozzle to thoroughly mix the hardener and resin together.

E. Epoxy anchor grout shall be capable of being used in submersed applications once cured.

F. Compressive strength per ASTM D 695 - Test Method for Compressive Properties of Rigid Plastics shall be 10,000 psi minimum.

G. If the average working or operating temperature will be over 100 degrees F or in a high fire risk area, use cement based non-shrink grout and oversized holes.

H. Overhead anchors and anchors in fire-resistive construction shall be cast-in anchors.

I. Embedment of adhesive anchors/rebar shall be deep enough to develop the anchor/rebar. Embedment shall not exceed 67 percent of the member depth.

J. Epoxy anchor grout shall be SET-XP by Simpson Strong-Tie Co., Inc.; Powers PE1000+ by Powers Fasteners, Inc.; RE 500 SD by Hilti, Inc.; or approved equal.

PART 3 – EXECUTION 3.0.1.

PREPARATION

A. All bonding surfaces shall be clean and dust and oil free. Grout shall be mixed and applied in accordance with manufacturer's recommendations.

B. Grout Mix proportions (for grout to fill cores in reinforced masonry walls): 1. One part Portland cement, Type I or II. 2. 2-1/4 parts damp, loose sand. 3. Parts shot gravel (3/8" maximum). 4. Mix to conform to ASTM C476-83 with a minimum compressive strength of 2500 psi at 28 days, have an 8" minimum and 10" maximum slump.

C. Grout shall not be placed until base concrete or masonry has attained its design strength, unless authorized otherwise by the Engineer. Surfaces that will be in contact with grout shall be free of dirt, loose rust, oil, wax, grease, curing compounds, laitance, loose concrete, and other deleterious materials.

D. Mechanical, electrical, and finish WORK shall be completed prior to placement of topping or concrete/grout fill. To ensure bonding to the base slab, the base slab shall be given an exposed aggregate finish. Alternatively where accepted by the Engineer, the base slab shall be given a roughened textured surface by a close-spaced rake while the surface is green. After curing, high pressure washing shall expose the aggregates and produce not less than a 3/16-inch amplitude roughness. Jackhammers or chipping hammers shall not be used.

3.0.2. INSTALLATION

A. Non shrink Grout:

1. Non shrink, nonmetallic grout shall be used for grouting precast concrete wall panel connections, column base plates, anchor bolts, reinforcing bars, pipe sleeves, and machinery supports.

2. Grout shall be mixed as close to the work area as possible and transported quickly to its final position in a manner which will not permit segregation of materials.

3. Non shrink grout shall be cured with water saturated burlap for at least three days or with an application of Super Rez Seal cure and seal compound applied immediately after grout placement.

4. Machinery set on grout pads shall not be operated until the grout has cured for at least 24 hours.

5. Expansive, non-shrink epoxy grout in the category of the DP Five Star Epoxy Grout shall be used for installation of vibrating machinery such as pumps.

B. Epoxy Adhesive Anchors: Grout shall be proportioned and mixed with automatic equipment. Unless otherwise indicated, embedment shall be sufficient to develop the ultimate tensile strength of the anchor or reinforcing bar per the manufacturer's ICCES report but shall not be less than 8 diameters for threaded rod or 12 diameters for reinforcing or smooth bars. Holes shall be dry.

C. Drilled anchors and reinforcing bars shall be installed in strict accordance with the manufacturer's instructions. Holes shall be roughened with a brush on a power drill, and cleaned. Drilled anchors shall not be installed until the concrete has reached the required 28 Day compressive strength. Anchors shall not be loaded until the grout has reached its indicated strength in accordance with the manufacturer's instructions.

END OF SECTION

03400 PRECAST PRESTRESSED CONCRETE

PART 1 – GENERAL

1.0.1. SCOPE OF WORK

A. The work under this section includes the design, casting, delivery, erection and shoring of precast prestressed concrete structures as shown on the Contract Drawings.

1.0.2. RELATED WORK

A. Section 03300 “Cast-in-Place Concrete, Reinforcement and Formwork”.

B. Section 01340 “Shop Drawings”.

1.0.3. REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. Without limiting the generality of other requirements of these specifications all work hereunder shall conform to the applicable requirements of the referenced portions of the following documents, to the extent that the requirements therein are not in conflict with the provisions of this Section:

1. South Florida Building Code, latest edition.

2. ACI 318, Building Code Requirements for Reinforced Concrete.

3. PCI MNL 116, Manual for Quality Control for Plants and Production of Precast Concrete Products.

4. ASTM A416, Specification for Uncoated Seven-Wire Stress-Relieved Steel Strand for Prestressed Concrete.

1.0.4. QUALITY ASSURANCE

A. Fabricator shall be a recognized prestressed concrete manufacturer with minimum five (5) years' experience in the manufacture and erection of similar units and whose design, fabrication and erection operations are supervised by a Florida Registered Professional Engineer.

1.0.5. CONTRACTOR SUBMITTALS

A. Shop Drawings: The Contractor shall submit shop and erection drawings for approval, showing concrete design strength; unit dimensions; unit weights; size, number, location and stress in prestressing strands; size, number and location of reinforcing bars including reinforcing for erection and handling stresses; concrete cover over reinforcing and strands; bearing and anchorage details; concrete finish; curing method; erection marks; hoist points and shoring points.

B. Design Calculations: The Contractor shall submit for approval, neat, legible and complete design calculations prior to fabrication. Calculations shall be by a Florida Registered Professional Engineer whose seal shall appear on calculation sheets and shop drawings.

1. Calculations shall include predicted in-place cambers without superimposed loads, with superimposed dead loads and with superimposed dead loads and live loads.

2. Span length in calculations shall be from center of bearing to center of bearing.

3. Include bearing and anchorage details including those in the precast sections and those in the job cast concrete structure.

C. Certificates: The Contractor shall submit manufacturer's test certificates on prestressing strands and reinforcing.

D. Concrete Cylinder Tests: The Contractor shall submit copies of cylinder break reports by an approved commercial test laboratory, made from each casting for this project to verify that concrete has attained minimum ultimate prestressed transfer strength specified.

1.0.6. DEFINITIONS

A. In these specifications, where the terms "Precast Concrete" and "Precast Concrete Specialties" are used, they shall have equivalent meaning.

PART 2 – PRODUCTS

2.0.1. MATERIALS

A. Concrete: Minimum 7 day ultimate compressive strength 4000 of psi. Higher strength will be permitted to suit manufacturer's design. In other respects, concrete shall comply with requirements of Section 03300 “Cast-in-Place Concrete, Reinforcing and Formwork”.

B. Prestressing Strands: High strength 7 wire strand conforming with ASTM A416-94. Elongation test conforming with ASTM A270-90 with minimum elongation at rupture of 3.5% in 24 inches. Tests need not be made if certification of conformance with specifications is provided by manufacturer. Use strand of U.S. manufacture.

C. Reinforcing Steel: ASTM A615, grade 60.

D. Forms: Provide smooth units true to size, shape and detail with flat panes, sharp lines and arises, free from warp, twist, bow or similar distortions, spalling, broken edges, cracks or similar defects. Dimensional tolerances to be as provided in ACI 525 Standards Minimum Requirements for Thin Section Precast Concrete Construction.

2.0.2. FABRICATION

A. General: Fabricate units accordance with approved shop drawings and approved design calculations

B. Unit design and fabrication: Conform with ACI Standard Building Code Requirements for Reinforced Concrete and the Prestressed Concrete Institute Standards. Fabricator shall design joists and beams in accordance with loads indicated on drawings. Camber under dead load or deflection under total load shall not exceed 1/360 of span.

C. Inserts: Install hanger inserts and sleeves in unit forms for mechanical and electrical items as provided under other sections and as shown on drawings.

D. Curing: Top surface to receive water curing only.

E. Marking: Distinctively mark each unit with manufacturer's name and mark indicated on erection drawings.

F. Age: Units shall be minimum 10 days old before shipping or erection.

2.0.3. PREFORMED JOINT SEALANT

A. The joint sealing compound shall be Quik-Seal, a preformed, cold applied, ready to use plastic joint sealing compound as supplied by Quikset Utility Vaults, Santa Ana, California; Ram-Nick by K.T. Snyder Company; or approved equal.

2.0.4. MORTAR

A. Mortar used between the sections of precast concrete vaults shall be as recommended by the manufacturer.

2.0.5. NON-SHRINK GROUT

A. Non-shrink grout shall be as specified in the Section 03360 "Grout".

2.0.6. QUALITY CONTROL

A. Precast concrete units shall be made by an experienced manufacturer and shall be constructed as shown on the drawings and specified herein and shall be free of defects, checks and cracks. Care shall be taken in the mixing of materials, casting, curing and shipping to avoid any of the above.

B. The Contractor shall notify the City a minimum of 5 days before the units are cast and 5 days before shipment is made, in order to provide for plant inspection, if the City so directs.

PART 3 – EXECUTION

3.0.1. ERECTION

A. Erection to be by manufacturer and supervised by manufacturer's Florida Registered Professional Engineer or authorized representative. Handle and install units with precision, in conformance with drawings, details and erection drawings.

3.0.2. INSTALLATION

A. Required pads, plates and reinforcing bars shall be furnished for casting and anchorage in the adjoining work. The precast concrete units shall be installed in a workmanlike manner with the units tight and at right angles to the supporting beams or walls. The units shall be aligned and leveled in accordance with the procedures recommended by the manufacturer. Units shall be grouted by a mixture of not less than one part cement to three parts fine sand, care being taken to see that joints are filled. Damp grout that may have seeped through shall be removed before it hardens.

B. All openings in the precast units shall be made by the Contractor and are the responsibility of the Contractor. Where details for an opening are not shown on the drawings, the opening shall be made in accordance with the recommendation of the manufacturer. When an opening causes a loss in carrying capacity of the unit, the adjacent units shall be designed to carry the additional dead and superimposed load transferred from the unit with the opening. The Contractor shall provide saddle headers as required.

C. Extreme care shall be used to avoid damaging or soiling concrete as no repairing or cutting will be permitted. Damaged units shall be replaced at the expense of the Contractor. Wooden hammers shall be used, with pinch bars being used on unexposed parts only.

3.0.3. CLEANING AND REPAIRS

A. Cleaning: Clean exposed surfaces of units of stains to a uniform appearance. Do not use caustic or acid cleaners.

B. Repairs: Repair nicks or chips in exposed areas.

END OF SECTION

DIVISION 5 – METALS

05550 ALUMINUM RAILING

PART 1 - GENERAL

1.0.1. SCOPE OF WORK

A. The Contractor shall design, furnish, fabricate, and install aluminum railing and appurtenances as indicated on the Drawings, complete, all in accordance with the requirements of this section.

1.0.2. QUALITY ASSURANCE

Standards: Unless otherwise specified, all materials, workmanship and practices shall conform to the following Standards:

A. South Florida Building Code, latest edition.

B. Aluminum Construction Manual, latest edition, by the Aluminum Association.

C. Applicable OSHA requirements

D. Rail and fittings shall be clear anodized, as specified below. Railing shall be plastic wrapped for protection. Wrap shall be removed only after erection.

1.0.3. SUBMITTALS

A. The Contractor shall submit to the Engineer of Record detailed shop drawings, prior to fabrication, for review and approval. The drawings shall be complete, covering all aluminum railing members, fastenings, connections, means of galvanic protection, etc., which for part of a finished structure.

B. Where written certification are called for below, it shall be submitted to the Engineer of Record.

PART 2 – PRODUCTS

2.0.7. ACCEPTABLE MANUFACTURING

G. Wesrail: Moultrie Manufacturing Co.

H. Thompson Railing Systems: Thompson Fabricating Co.

I. Approved equals.

2.0.8. ALUMINUM RAILING SYSTEM

A. General: Where indicated on the Drawings, pipe handrailing shall be provided. Pipe handrailing shall be supplied as required by the South Florida Building Code and OSHA whether indicated on the Drawings or not, including stair railings.

B. Prior to fabrication, verify all dimensions by actual measurement, so that the finished ladder will fit accurately and provide a neat appearance, with no part out of line and grade by more than 1/8 inch.

C. Handrailing system, including rails, stanchions and attachments, shall be designed and constructed to resist a load of not less than 200 pounds applied in any direction and at any point on the rails.

D. The handrailing shall be of welded construction design, with field splices where required between sections. All exposed welds shall be continuous fillets, watertight, and ground smooth. Bends, warps and ramps in the rails shall be made by bending the pipe to true and even curves, without kinks.

E. Vertical pipe supports to be set in concrete shall be set in built-in pipe sleeves, or concrete may be cored, minimum 5-inches in length. Removable posts shall be sleeved. The joint between upright and sleeve shall be cemented with epoxy grout.

F. Wall brackets for handrail shall be as manufactured by Mouitrie Manufacturing Company, J.G. Braun Company, Fulton Metal Products Company, or equal. Wall brackets shall be fabricated of metal compatible with handrail metal. End all wall mounted railings at the line of the first nosing.

G. Provide chain gates across all openings in railings. Chain shall be welded, stainless steel, close link hoisting chain, 1/4-inch by 1-5/16 inch links. One end of each chain gate shall be attached by a stainless steel shackle to a 1/4-inch round stainless steel stock eye bolted to the pipe stanchion and the other end connected to a heavy stainless steel snap hook. A 1/4-inch stainless steel eye shall be provided in the opposite stanchion or concrete wall, installed at the height of the center lines of the top rail.

H. Aluminum Railing: Stanchions and rails shall be nominal 2 inch diameter minimum, Schedule 80 aluminum alloy 6061-T6 with clear anodized finish. Railing posts must be adequately reinforced to meet the specified design loads. Handrailing shall be 42 inches in height. In no case shall the spacing of handrail posts exceed five (5) feet on center. Stainless steel railings may be used in lieu of aluminum railing at the CONTRACTOR's option.

I. Kickplates: Kickplates where not specifically called for in the Drawings shall be furnished and installed typically at the edges of all metal walkways and at other handrail installations. Kickplates shall be l/4-inch thick, must meet OSHA

5-02

requirements, shall project 4-inches above walkway surface, may not infringe on minimum required walkway width and material must be the same as that of handrail construction. Kickplates shall be connected to handrail posts as detailed on the drawings.

2.0.9. FINISHES

A. Finish shall be natural anodized after forming, and before assembly. Each piece of aluminum to be anodized shall be finished (anodized) in accordance with the following Aluminum Association Designations:

1. Sheet: AA-M10C11c21A31, with minimum 0.4 mil coating

2. Structural shapes, plates, bars and pipe: AA-M10C11C21A41, with minimum 0.8 mil coating.

B. All fabricated aluminum items of the railing shall be anodized after fabrication. No touch-up paint will be accepted.

C. A written certification stating compliance with the aluminum finish (anodizing) as specified above shall be furnished for all aluminum material and/or items furnished and installed by the Contractor.

D. Protect all aluminum by a factory applied coating of water-tight clear methacrylate lacquer having a minimum thickness of 0.008"minimum capable of withstanding the action of lime and mortar for a period of at least one week in an atmosphere of 100% relative humidity at 100ºF.; the action of 10% by weight muriatic acid for a period of six hours at 70ºF.; and the action of the atmospheric weather for a period of 12 months. The coating shall be sprayed on, after anodizing and sealing procedures have been followed. Submit written certification indicating that the coating meets or exceeds the requirements of the Aluminum Association Mortar Test for Clear Lacquers on Anodized Aluminum.

2.0.10. EXPANSION BOLTS

A. Stainless steel type 316 wedge bolts furnished by handrail manufacturer.

PART 3 -- EXECUTION

3.0.1. EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

B. Beginning of installation means erector accepts existing conditions.

3.0.2. PREPARATION

A. Clean and strip primed items to bare metals where site welding is required.

B. Supply items required to be cast into concrete with setting templates, to appropriate sections.

3.0.3. FABRICATION

A. Fabricate railings in shop, made and erected square, plumb, straight and true, designed for adjustment to field variations, accurately fitted with tight joints and intersections.

3.0.4. INSTALLATION

A. Install items plumb and level, accurately fitted, free from distortion or defects.

B. Provide anchors and plates required for connecting railings to structure.

C. Aluminum Railings: Aluminum railing fabrication shall be performed by craftsmen experienced in the fabrication of architectural metal work. Exposed surfaces shall be free from defects or other surface blemishes. Dimensions and conditions shall be verified in the field. All joints, junctions, miters and butting sections shall be precision fitted with no gaps occurring between sections, and with all surfaces flush and aligned. Electrolysis protection of materials shall be provided.

D. After satisfactory installation, all coating shall be removed leaving the clean undamaged surface. In locations where aluminum may come in contact with dissimilar metals or masonry, the surfaces shall be given a heavy brush coat of alkaliresistant bituminous paint or separated with a non-absorptive tape or gasket.

3.0.5. EXPANSION BOLTS

A. Expansion bolts shall be spaced 10d apart and 5d edge distance for no reduction in pull out strength. A safety factor of four shall be provided on expansion bolt pull out values published by the manufacturer.

3.0.6. ALUMINUM SURFACES

A. Aluminum surfaces in contact with concrete, grout (except epoxy grout), dissimilar metals (except stainless steel), or buried in the ground shall be protected with a heavy coat of Bitumastic No. 300, as manufactured by Kop-Coat, Inc., or approved equal.

END OF TECHNICAL SPECIFICATIONS

EVALUATION PROCESS

SELECTION COMMITTEE

A Selection Committee, consisting of City personnel, will convene, review and discuss all proposals submitted.

The Selection Committee will use a point formula during the review process to score proposals and assign points in the evaluation process in accordance with the evaluation criteria. The Proposer shall satisfy and explicitly respond to all the requirements of the RFP, including a detailed explanation of how the services shall be performed.

Each proposal will be reviewed to determine if the Proposal is responsive to the submission requirements outlined in the Solicitation. A responsive Proposal is one which follows the requirements of this Solicitation that includes all documents submitted in the format outlined in this Solicitation, is of timely submission, and has the appropriate signatures as required on each document. Failure to comply with these requirements may result in the Proposal being deemed non- responsive. The Contract (s) will be awarded to the most responsive Proposer whose Proposal best serves the interest of and represents the best value to the City of Opa-locka.

EVALUATION CRITERIA

The Committee may select and choose to invite any and/or or all firms to make presentations and be interviewed by the Committee as part of the evaluation process for this Solicitation. The Committee's decision will be communicated by staff to all Proposers. The Proposer's presentation may clarify but may not modify their submitted Proposal. Any discussion between the presenter (s) and Evaluation Committee during presentations are intended only for purposes of providing clarification in response to questions from the Committee.

Category	Points
1. Experience and Qualifications. The technical expertise and professional competence in areas directly related to this RFP; required number of years of experience in performing similar work 2. demonstrated. The ability to manage and coordinate the services, deliver quality products/services, be a reliable service provider, stay within budget, and meet deadlines; level of experience and training of key personnel assigned, including sub-consultants, if applicable; strength and stability of the firm; breadth and depth of resources.	40
1. References Provide a minimum of three (3) references of recent demonstrated experience in providing consulting services similar in nature and size to the Scope of Work and include any government references. Provide a short description of the work performed, dates of service, names, addresses, telephone numbers, fax numbers, locations, remedies, and contract amount.	20
1. Resources and approach The methodology and systems reflecting the ability to provide the requested services; thorough discussion of objectives; sensitive approach to public and regulatory concerns; management, coordination of services and quality controls; attention to detail and creativity.	30
Price Proposal 1. Cost of proposed services	10
TOT ıL	100

ORAL PRESENTATIONS

Proposers may be required to make individual presentations to the City Selection Committee to clarify their proposals. Only those firms with the highest rated scores in accordance with the stated criteria and their weights will be invited to give oral presentations. However, the City has the right to accept the best proposal as submitted, without discussion or negotiation.

If the City determines that such presentations are needed, a time and place will be scheduled for oral presentations. Each Proposer shall be prepared to discuss and substantiate any of the areas of the proposal submitted, and its qualifications to perform the specified services. During the oral presentations, the Proposers should relate their discussion to the evaluation criteria, which will include (but not be limited to) their approach to the project. The proposed Project Manager must be in attendance.

The Evaluation Criteria may be changed for the oral presentation evaluation phase. References and site visits (if completed) shall be included in the final evaluation criteria, along with other criteria and weights as determined by the Selection Committee. Finalists will be informed as to the revised criteria, if any, prior to their oral presentation.

Additionally, prior to award of an Agreement pursuant to this RFP, the City may require Proposers to submit such additional information bearing upon the Proposer's ability to perform the services in the Agreement as the City deems appropriate.

FINAL SELECTION

The City of Opa-locka will select the firm that meets the best interests of the City. The City shall be the sole judge of its own best interests, the proposals, and the resulting negotiated Agreement. The City's decisions will be final. Following the selection of firm, the expectation is that an Agreement will be executed between both parties. City staff will recommend award to the responsible Proposer whose Proposal is determined to provide overall best value to the City, considering the evaluation factors in this RFP.

AWARD AND CONTRACT EXECUTION

After review by the Selection Committee of the proposals and oral presentations a recommendation will be made to the City Manager for submission to the City Commission for final approval. Upon Commission authorization, contract negotiations will be initiated with the first ranked firm. If those negotiations are unsuccessful, the City will formally terminate negotiations with the first ranked firm and will commence contract negotiations with the next ranked firm, etc. Upon successful contract negotiations with the prevailing firm, the remaining firms will be notified that the process has been completed and that they were not selected.

THE CITY OF OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

TO THE COMMISSION OF THE CITY OF OPA- LOCKA,
FLORIDA

Ladies and Gentlemen:

The undersigned bidder proposes to furnish all labor, tools, material and supplies, and to sustain all the expense incurred in doing the work set forth below that may be awarded the undersigned by the City of Opa-Locka, Florida, through its proper officers, and to do the same strictly in accordance with the plans and contract documents on file in the Office of the City Engineer of Opa-Locka, which are referred to below and made a part hereof, at the following combination of lump sum prices:

Item No.	Estimated Quantity	Description	Total
1.	Lump Sum (Divided into 2 or 4 payments See Measurement and Payment for Conditions)	For performing preparatory work and operations in mobilizing for beginning the work of the Project, but excluding materials and permit costs, both of which are paid under other payments items, the lump sum of _____ Dollars and _____ Cents	$_____
2.	130 LF	For selling and delivering to the City 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert installation, the price per linear foot of _____ Dollars and Cents	$_____

3.	130 LF	For installing 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert, price per linear foot of _____ Dollars and Cents	$_____
Item No.	Estimated Quantity	Description	Total
4.	75 LF	For selling and delivering to the City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of _____ Dollars and Cents	$_____
5.	75 LF	For installing City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of _____ Dollars and Cents	$_____
6.	Lump Sum	For demolition and removal of existing three (3) 66-inch concrete pipe culvert with headwalls and retaining walls, the lump sump of _____ Dollars and Cents	$_____

7.	670 CY	For the excavating of existing backfill material at existing Culvert location, the price per cubic yard of _____ Dollars and Cents	$_____

8.	Lump Sum	For providing adequate bypass pumping to maintain uninterrupted Canal flow during construction, the price per lump sump of _____ Dollars and Cents	$_____
Item No.	Estimated Quantity	Description	Total
9.	100 LF	For furnishing and installing all necessary Turbidity Barriers for erosion control measures specified on plans, the price per linear foot of _____ Dollars and Cents	$_____
10.	2 Each	For furnishing and installing all necessary Drop Inlet Sediment Protection for erosion control measures specified on plans, the per unit of _____ Dollars and Cents.	$_____

11.	45 CY	For selling and delivering to the City Concrete for the installation of 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, the price per cubic yard of _____ Dollars and Cents.	$_____
12.	45 CY	For constructing 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, as indicated in the Plans, the price per cubic yard of _____ Dollars and Cents.	$_____

13.	405 SF	For furnishing and constructing 4-inch thick sidewalk and ramp curbing to match existing per FDOT index No. 310, the price per square foot of _____ Dollars and Cents.	$_____
Item No.	Estimated Quantity	Description	Total
14.	150 SF	For constructing new concrete curb and gutter per FDOT index No. 300, the price per square foot of _____ Dollars and Cents.	$_____

15.	200 CY (Contingent Item)	For furnishing and placing suitable Backfill (A-24 or better) required for Culvert placement, the price per cubic yard of _____ Dollars and Cents.	$_____
16.	280 TON	For furnishing and installing Rubble (Broken Stone), including filter fabric, at Culvert embankment for the rip-rap installation as per FDOT Standard Specification No. 530, the price per ton of _____ Dollars and Cents.	$_____

17.	25 CY	For furnishing and installing sand-cement rip rap bags at culvert pipe ends per Miami-Dade County DTPW BC 3.4 & BC 3.5 for straight end pipes, the price per cubic yard of _____ Dollars and Cents.	$_____
Item No.	Estimated Quantity	Description	Total
18.	45 CY	For furnishing and constructing concrete endwall for three (3) 66” barrel culvert installation as per FDOT index 430-032, the price per cubic yard of _____ Dollars and Cents.	$_____

19.	65 LF	For furnishing and installing concrete shoulder barrier as per FDOT index No. 521-001, the price per linear foot of _____ Dollars and Cents.	$_____
20.	1025 SY	For milling (nominal 1 inch thick), surface course for permanent paving repairs, the price per square yard of _____ Dollars and Cents.	$_____
21.	1025 SY	For constructing for Type "V" permanent paving repairs as per details provided in plans, the price per square yard of _____ Dollars and Cents.	$_____

22.	8 each	For replacing pavement markings damaged, removed, or obliterated by the contractor's operation, the price per unit of _____ Dollars and Cents.	$_____
Item No.	Estimated Quantity	Description	Total

23.	40 SY (Contingent Item)	For restoring sodded area, the price per square yard of _____ Dollars and Cents.	$_____
24.	Lump Sum	For providing full Traffic Control during construction, Maintenance of Traffic, the lump sum price of _____ Dollars and Cents.	$_____
25.	2100 SF (Contingent Item)	For sheeting and shoring ordered left in place by the Engineer, the price per square foot of _____ Dollars and Cents.	$_____
26.	670 CY (Contingent Item)	For removal, transport and legal disposal of unsuitable backfill materials, including tipping fees, the price per cubic yard of _____ Dollars and Cents.	$_____

27.	**Sub-Total – Bid Items 1 through 26**	**$_____**	

Item No.	Estimated Quantity	Description	Total
28.	Dedicated Allowance	For providing uniformed, off-duty policemen for the purpose of maintenance of traffic, the aggregate sum of _____ Dollars and Cents.	$_____
29.		For all cost of required permit fees, impact fees, if required by the Engineer, the sum of 3% of the Subtotal, Item 27 (0.03) x (Subtotal, Item 27) _____ Dollars and Cents.	$_____
30.		For unforeseen conditions, for minor construction changes and for quantity adjustments, if ordered by the Engineer, the sum of 10% of the Subtotal, Item 27 (.10) x (Subtotal, Item 27) _____ Dollars and Cents.	$_____

31.	**TOTAL BID – (Sum of Bid Item Nos. 27, 28, 29 and 30)**	$_____	

Note: For a detailed description of each Quotation Item, refer to Section 01025 of the Specifications entitled "Measurement and Payment.

THE CITY OF OPA-LOCKA OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

The City of Opa-Locka reserves the right to waive any informality in any bid and to reject any or all bids.

TOTAL BASE BID PRICE FOR PROPOSAL (ITEMS 1 THROUGH 32): $_____
(FIGURES)

_____Dollars and

_____Cents

AMOUNTS SHALL BE SHOWN ON BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT SHOWN IN WORDS SHALL GOVERN FOR EACH BID ITEM AND TOTAL BASE BID.

Bidder acknowledges that included in the various items of the bid proposal and in the TOTAL BASE BID PRICE are costs for complying with the Florida Trench Safety Act, F.S. 553.60 et. seq. The Bidder by signing and submitting the Trench Safety Act Compliance Statement is, in writing, assuring that it will perform any trench excavation in accordance with applicable trench safety standards.

Contract award shall be based upon the total base bid price, as identified above, by the lowest responsive, responsible bidder.

_____ _____ FIRM

NAME (PRINT) BIDDER'S SIGNATURE

PROJECT PLANS COMPLETION PERCENTATGE:

300 Engineering Group, LLC

CONTRACT NO. 20-0324200 - TASK 3

CULVERT REPLACEMENT ALONG SESAME STREET
BETWEEN NW 135TH STREET AND ATLANTIC AVENUE

Engineer's Opinion of Probable Cost

A - CONSRUCTION ITEMS						
ITEM NO.	DESCRIPTION	UNIT	COST/UNIT	QUANTITY	TOTAL COST	COMMENTS
			Civil			
1	FURNISH AND INSTALL INLET PROTECTION SYSTEM	EA	$300.00	2	$600.00	
2	FURNISH AND INSTALL FLOATING TURBIDITY BARRIER	LF	$35.00	100	$3,500.00	
3	FOR SELECTIVE DEMOLITION	SF	$60.00	2000	$120,000.00	
4	FOR EXCAVATING EXISTING BACKFILL MATERIAL	CY	$95.00	670	$63,650.00	
5	FURNISH AND INSTALL CANAL BYPASS PUMPING	Day	$3,250.00	45.000	$146,250.00	
6	FOR REWORK LIMEROCK BASE, 4"	SY	$25.00	35	$875.00	
7	FOR MILLING EX. ASPHALT PAVEMENT, 1" AVG DEPTH	SY	$5.00	1025	$5,125.00	
8	FOR FURNISHING AND PLACING SUITABLE BACKFILL MATERIAL	CY	$70.00	200	$14,000.00	
9	FURNISH AND INSTALL SUPERPAVE ASPHALTIC CONCRETE, SP-9.5, PG	TN	$460.00	60	$27,600.00	
10	FURNISH AND INSTALL CONCRETE SIDEWALK, 4" THICK	SY	$100.00	55	$5,500.00	
11	FURNISH AND INSTALL CONCRETE PAVEMENT, 10" THICK	SY	$375.00	170	$63,750.00	
12	FURNISH AND INSTALL PIPE CULVERT ROUND, 66" DIAMETER	LF	$1,050.00	130	$136,500.00	
13	FURNISH AND INSTALL STRAIGHT CONCRETE ENDWALL	CY	$1,950.00	45	$87,750.00	
14	FURNISH AND INSTALL CONCRETE CURB & GUTTER, TYPE F	LF	$35.00	345	$12,075.00	
15	FURNISH AND INSTALL DETECTABLE WARNINGS	SF	$60.00	25	$1,500.00	
16	FURNISH AND INSTALL RIPRAP-SAND-CEMENT BAGS	CY	$600.00	25	$15,000.00	
17	FURNISH AND INSTALL RIPRAP-RUBBLE STONE	TN	$175.00	280	$49,000.00	
18	FURNISH AND INSTALL CONCRETE SHOULDER BARRIER	LF	$620.00	65	$40,300.00	
19	FURNISH AND INSTALL GUARDRAIL-ROADWAY	LF	$70.00	75	$5,250.00	
20	FURNISH AND INSTALL THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF	$10.00	72	$720.00	
21	FURNISH AND INSTALL THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6"	GM	$9,100.00	0.013	$118.30	

22	FURNISH AND INSTALL THERMOPLASTIC, STANDARD, WHITE , SOLID, 6"	GM	$9,350.00	0.038	$355.30	
23	FURNISH AND INSTALL RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	EA	$80.00	8	$640.00	
24	FURNISH AND INSTALL PERFORMANCE TURF	SY	$20.00	40	$800.00	
			SUBTOTAL A - CONSTRUCTION COSTS:		$800,858.60	
B - OTHER DIRECT COSTS						
	MOT AND TRAFFIC CONTROL (PERCENTAGE OF A) :		5.8%		$46,449.80	
	MOBILIZATION AND DEMOBILIZATION (PERCENTAGE OF A) :		10.0%		$80,085.86	
	OFF-DUTY POLICE OFFICER		-		-	
	SUBTOTAL B - OTHER DIRECT COSTS: $126,535.66 CONSTRUCTION SUBTOTAL (A + B): $927,394.26					
C - CONTINGENCY						
FOR UNFORSEEN CONDITIONS, MINOR CONSTRUCTION CHANGES, AND QUANTITY ADJUSTMENTS AS ORDERED BY THE ENGINEER (PERCENTAGE OF CONSTRUCTION SUBTOTAL):			10.0%		$80,085.86	
DEDICATED ALLOWANCE: JET EXISTING STORM PIPES SOUTH OF CULVERT		LF	$20.00	200	$4,000.00	
DEDICATED ALLOWANCE: DESILT TWO (2) DRAINAGE STRUCTURES		EA	$500.00	2	$1,000.00	
DEDICATED ALLOWANCE: SHEETING & SHORING		SF	$20.00	2100	$42,000.00	
DEDICATED ALLOWANCE: REMOVAL & TRANSPORT OF UNSUITABLE BACKFILL		CY	$60.00	670	$40,200.00	
DEDICATED ALLOWANCE: PERMITS, BONDS, INSURANCE, MAINTENANCE BOND			5.0%		$40,042.93	
OFF DUTY POLICE OFFICER ALLOWANCE (BASED ON PART-TIME FOR 60 CONSTRUCTION DAYS)			-		$26,400.00	
			TOTAL VALUE OF ENGINEER'S OPINION OF PROBABLE COST (A + B + C):			$1,161,123.05

100%

RFP NO. 23-1016200

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: _____

   Address: _____

   City, State, Zip: _____ Phone/Fax: _____

2. Check One: Corporation ( ) Partnership ( ) Individual ( )

3. If Corporation, indicate:
   Date of Incorporation: _____ State in which Incorporated: _____

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization: _____

5. **Name and Title of Principal Officers Date Elected:**

   _____ _____

   _____ _____

   _____ _____

   _____ _____

6. The length of time in business: _years

7. The length of time (continuous) in business as a service organization in Florida: ___years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka RFP during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the Proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to insure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non- responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature_____

Printed Name _____

CITY OF OPA-LOCKA RFP NO. 23-1016200

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by_____ the
(Name)
_____ of _____
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

Date Signature

CITY OF OPA-LOCKA NON-COLLUSION AFFIDAVIT
STATE OF FLORIDA - COUNTY OF MIAMI DADE

_____ being first duly sworn, deposes and says that:

(1) He/She/They is/are the ____ (Owner, Partner, Officer, Representative or Agent) of _____ the PROPOSER that has submitted the attached proposal.

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal.

(3) Such Proposal is genuine and is not a collusive or sham Proposal.

(4) Neither the said PROPOSER nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPOSER, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPOSER, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPOSER, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPOSER, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPOSER or any other of its agents, representatives, owners, employees, or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

_____
Witness

By: _____
Signature

_____
Print Name and Title

_____
Witness

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not

engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By:_____

Title: _____

Sworn and subscribed before this

____day of_____, 20___

_____
Notary Public, State of Florida

_____
(Printed Name)

My commission expires: _____

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-Verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-consultants/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to

the City for any additional costs as a result of termination of the contract due to Contractor’s failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

“Contractor” means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

“Subcontractor” means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-Verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security’s E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the
U.S. Department of Homeland Security’s E-Verify System during the term of the contract is a condition of the contract with the City of Opalocka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the EVerify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name:

_____

Authorized Signature:

_____

Print Name:

Title:

Date:

RFP NO: 23-1016200

CITY OF OPA-LOCKA – REQUEST FOR PROPOSAL (RFP)
SESAME STREET CULVERT
REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE

780 FISHERMAN STREET
OPA-LOCKA, FL 33054

Miami-Dade County, Florida

Prepare For:

CITY OF OPA-LOCKA

Prepared By:

SAFA CONSTRUCTION, LLC

October 2023

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A. Cover Letter

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

October 14, 2023

City of Opa-Locka

Procurement Office

780 Fisherman Street

Opa-locka, FL 33054

Subject: Bid Proposal Submittal for Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave (RFP NO: 23-1016200)

Dear City of Opa-Locka,

I am writing to submit my bid proposal for the Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave as advertised by your esteemed organization. As a highly skilled and experienced Safa Construction, I am confident that my proposal will not only meet but exceed your expectations.

I have carefully reviewed the project requirements outlined in the Request for Proposal (RFP) document and believe that my expertise aligns perfectly with the needs of the project. I have a proven track record of delivering exceptional results in similar projects, and I am eager to bring my skills and knowledge to contribute to the success of your project.

I take great pride in my professionalism, attention to detail, and commitment to delivering projects on time and within budget. Throughout my career, I have built strong relationships with clients by actively listening to their needs, communicating effectively, and providing tailored solutions. I am confident that my dedication to customer satisfaction and my ability to adapt to changing project requirements will make me an ideal partner for this endeavor.

Furthermore, I understand the importance of collaboration and teamwork in achieving project success. I am ready to work closely with your team, actively participating in meetings, sharing progress reports, and addressing any concerns promptly. By fostering open communication and maintaining a strong work ethic, I am confident that we can achieve outstanding results together.

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

Thank you for considering my bid proposal for the Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave, I am excited about the possibility of collaborating with your organization and contributing to the success of this project. I am available for further discussion or clarification at your convenience.

I look forward to the opportunity of meeting with the City of Opa-Locka and discussing how we can best move forward. Once again, thank you for your time and consideration.

Sincerely,

Digitally signed by MD S RAHMAN
DN: c=US, o=SSN ENGINEERING LLC, dnQualifier=A01410D000001882EED5D770005B8FE, cn=MD S RAHMAN
Date: 2023.10.16 12:11:21 -04'00'

MD Shahinur Rahman, CGC, PMP, MS, PE (CA, FL)

PRESIDENT /CEO

SAFA CONSTRUCTION, LLC

SBE | CBE

B1. Insurance information

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 10/13/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		CONTACT NAME:	STACEY FRIEDMAN	
Insurance by Rob 4801 Johnson Road #13-14 Coconut Creek FL 33073		PHONE (A/C, No, Ext): (954) 331-4468	FAX (A/C, No):	
		E-MAIL ADDRESS: service@InsuranceByRob.com		
		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A : EVANSTON INS CO		35378
INSURED		INSURER B : INFINITY ASSUR INS CO		39497
SAFA CONSTRUCTION, LLC 11186 SW 17th Mnr Davie FL 33324		INSURER C : BERKSHIRE HATHAWAY DIRECT INSURANCE C(		10391
		INSURER D :		
		INSURER E :		
		INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [ ] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [ ] LOC [ ] OTHER:			SES1814296 00	05/06/2023	05/06/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY			82 509-82007-9259-001	10/20/2022	10/20/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		N9WC952274	04/02/2023	04/02/2024	[ ] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CITY OF OPA-LOCKA
780 FISHERMAN ST
OPA LOCKA FL 33054

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Stacey Friedman

© 1988-2015 ACORD CORPORATION. All rights reserved.

B2. Bonding Capacity

Alscott, Inc.

An AssuredPartners Company
4911 S. Arrowhead Dr. Suite 310
Independence, MO 64055
Phone: 816-525-3155

October 26, 2022

Re: Safa Construction
Davie, FL
Bonding Program

Dear Sir or Madam:

Please let this letter serve as notice that Safa Construction is bonded by the Foundation Surety & Insurance Solutions, which is listed as a U.S. Treasury Department approved surety.

Based upon our solid relationship, and Safa Construction's top rated performance, we are pleased to state that Safa Construction does have bonding capacity currently available with Foundation Surety & Insurance Solutions for a single bond of $1.5 million with an aggregate of up to $3.5 million. It is understood the issuance of any final or bid bonds is a matter between the Safa Construction and Foundation Surety & Insurance Solutions and no liability to third parties is assumed should bonds not be executed for any reason.

We fully recommend Safa Construction for your construction needs. You will find the company has a proven track record of owner satisfaction and of bringing projects in on time and within budget.

If you have any questions, please feel free to call.

Sincerely,

David S. Salavitch

David S. Salavitch
President

B3.Debarment, Suspension Certification

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature 

Printed Name MD SHAHINUR RAHMAN, CEO

B4. Drug-Free Certification

CITY OF OPA-LOCKA

RFP NO. 23-1016200

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by MD SHAHINUR RAHMAN the
(Name)
CEO of SAFA CONSTRUCTION, LLC
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

2/28/2023
Date Signature

B5. Non-Collusion Affidavit

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

I, MD SHAHINUR RAHMAN **being first duly sworn, deposes and says that:**

(1) He/She/They is/are the OWNER OF SAFA CONSTRUCTION, LLC (Owner, Partner, Officer, Representative or Agent) of _____ the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

_____ By: _____
Witness Signature

_____ MD SHAHINUR RAHMAN, CEO
Witness Print Name and Title

B6. Non-Discrimination Affidavit

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: MD SHAHINUR RAHMAN

Title: CEO

Sworn and subscribed before this

14th day of November, 2022

Ayesha Hack

Notary Public, State of Florida

AYESHA HACK

(Printed Name)

AYESHA HACK
Notary Public - State of Florida
Commission # HH 222913
My Comm. Expires Apr 17, 2026
Bonded through National Notary Assn.

My commission expires: 04-17-2026

B7. E-Verify Form

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: SAFA CONSTRUCTION, LLC

Authorized Signature: 

Print Name: MD SHAHINUR RAHMAN

Title: CEO

Date: 02/28/2023

B8. Certification Regarding Debarment

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly

rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature 

Printed Name MD SHAHINUR RAHMAN

B9. Licenses

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD

THE GENERAL CONTRACTOR HEREIN IS CERTIFIED UNDER THE
PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

RAHMAN, MD SHAHINUR

SAFA CONSTRUCTION, LLC
11186 SW 17TH MNR
DAVIE FL 33324

LICENSE NUMBER: CGC1531601

EXPIRATION DATE: AUGUST 31, 2024

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor

Melanie S. Griffin,Secretary

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE
PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

RAHMAN, MD SHAHINUR

11186 SW 17T MNR
DAVIE FL 33324

LICENSE NUMBER: PE80669

EXPIRATION DATE: FEBRUARY 28, 2025

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor

Melanie S. Griffin,Secretary

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE
PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

SHUVO, DILNAHAR HOSSAIN

11186 SW 17TH MNR
DAVIE FL 33324

LICENSE NUMBER: PE92997

EXPIRATION DATE: FEBRUARY 28, 2025

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C. Evaluation Criteria

C1. Experience and Qualifications
- i. List of major subcontractors
- ii. Organizational structure of the project
- iii. Quality Control Process
- iv. Brief resume of key persons
- v. Applicable certifications

C2. References
C3. Resources and approaches
C4. Schedule
C5. Price Proposal

i. List of major subcontractors

No	Name	State Document Number (Sunbiz)	The main responsibility in the project	Number of Years in Business
1	TORQUE LAND GRADING LLC	L21000126128	Demolition & riprap	2
2	I & C EARTHMOVERS, CORP.	P98000076719	Removing the material from site	25
3	AC TRENCH, CORP.	P08000034480	Demasking, backfill Installation the culvert	15
4	ARROW ASPHALT & ENGINEERING, INC	P97000003580	All Roadway work	26
5	SAFA CONSTRUCTION LLC	L21000422182	Project Management & Concrete Pavement	2

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: SAFA CONSTRUCTION, LLC

   Address: 11186 SW 17TH MNR

   City, State, Zip: DAVIE, FL 33324 Phone/Fax: (954) 326-8295

2. Check One: Corporation (✓) Partnership ( ) Individual ( )

3. If Corporation, state:
   Date of Incorporation: 09/20/2021 State in which Incorporated: FL

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization: N/A

5. **Name and Title of Principal Officers** **Date Elected:**

MD S RAHMAN, CGC,PE, PMP (CEO)	09/20/2021
DILNAHAR H SHUVO, PE (AR)	09/20/2021

6. The length of time in business: 2 (two) + years **Please Note that I (MD Shahinur Rahman) has 20+ years experience in construction and 20+ years Engineering experience)**

7. The length of time (continuous) in business as a service organization in Florida: 2 (two) + years

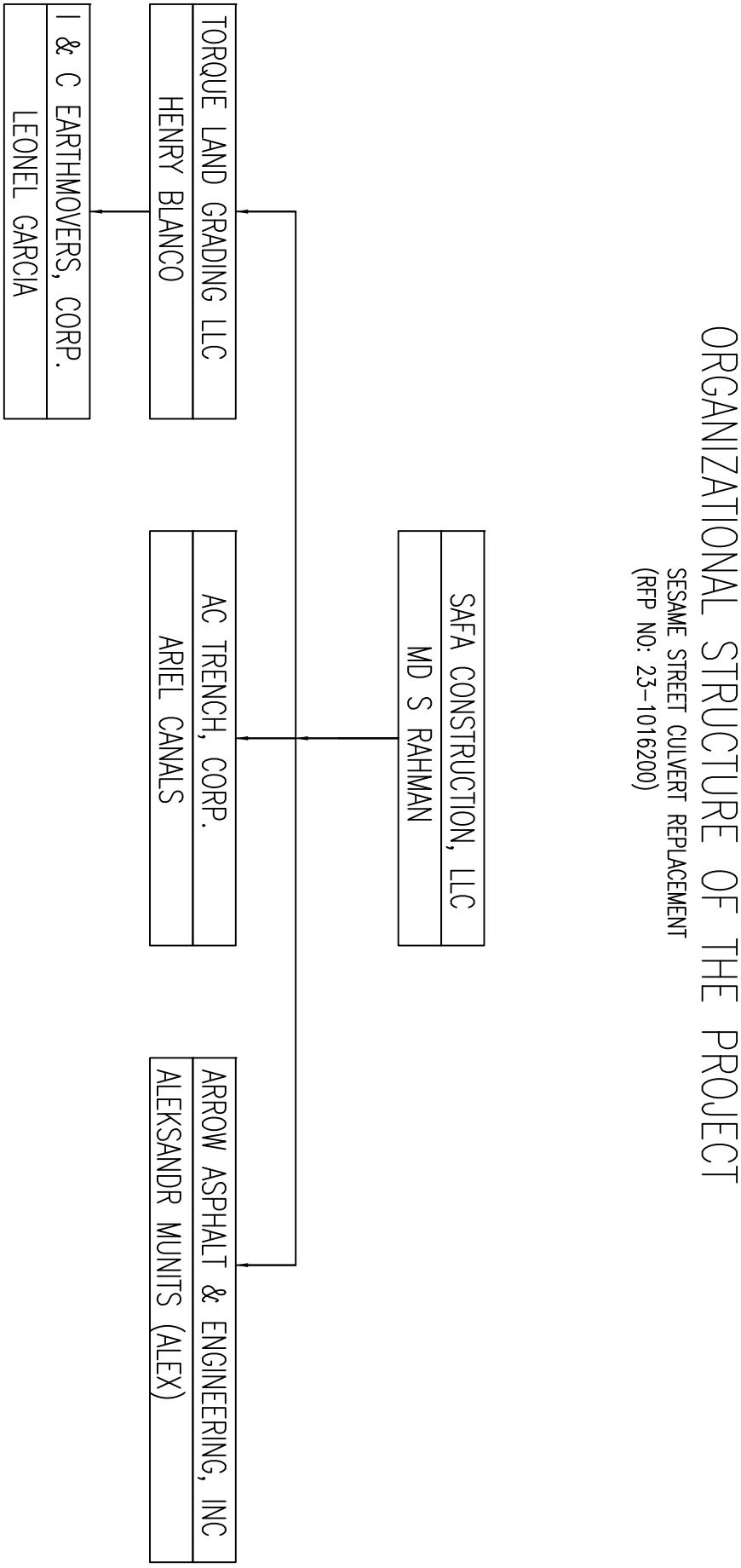
8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

With this short period of time SAFA Construction has done Eight (8) public projects and out of 8, 3 project with city of OPA-LOCKA.

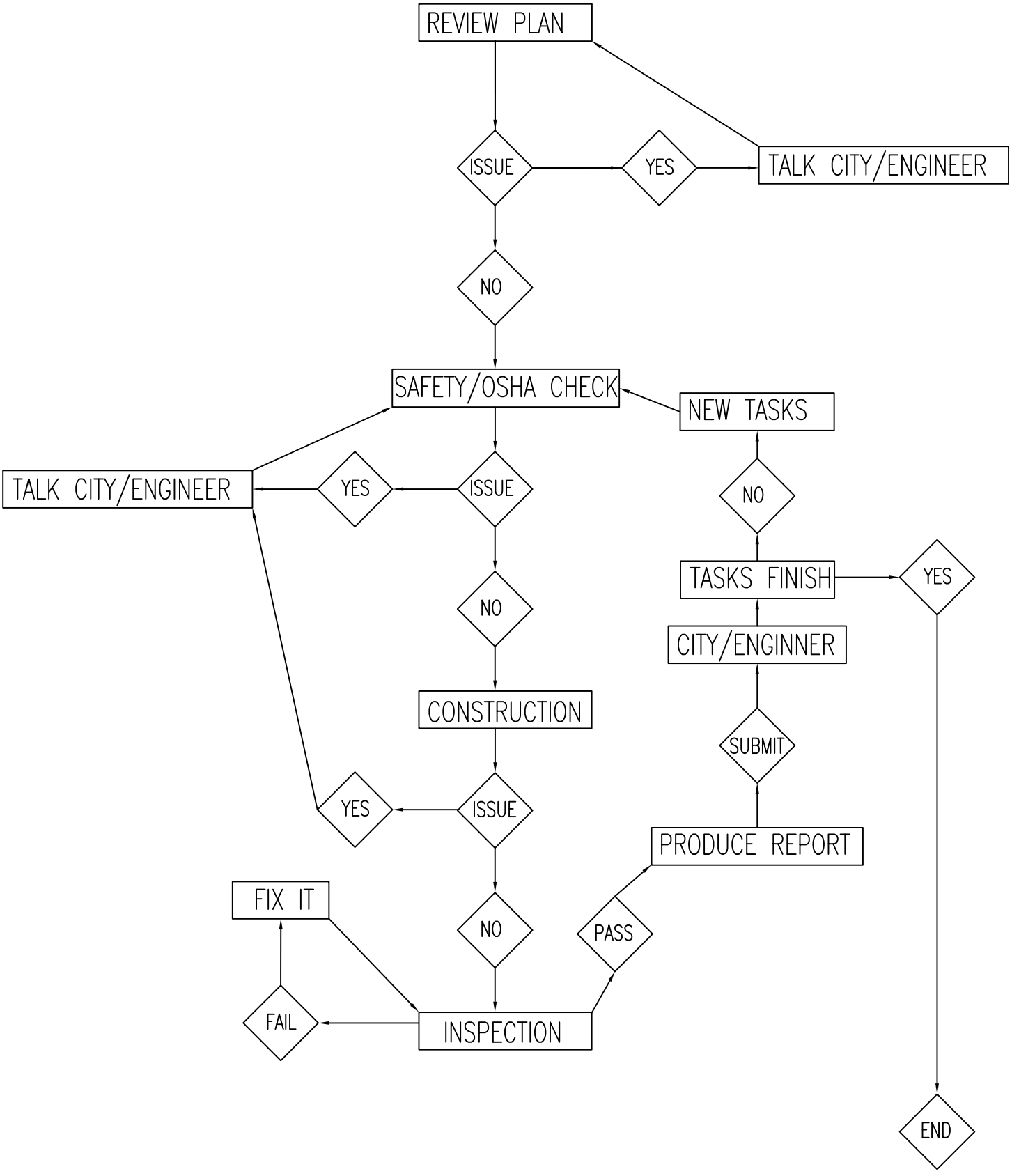
ii. Organizational structure of the project



iii. Quality Control Process

GENERAL OUTLINE FOR QUALITY CONTROL PLAN

SESAME STREET CULVERT REPLACEMENT
(RFP NO: 23-1016200)



MD Shahinur Rahman, CGC, PMP, MS, PE (CA, FL),

President

SAFA CONSTRUCTION, LLC

EDUCATION

- Master of Science in Computer Science, Texas A&M University, TX, 2003
- Bachelor of Science in Civil Engineering, Bangladesh University of Engineering and Technology (BUET), 1998

PROFESSIONAL CERTIFICATIONS

- Certified General Contractor CGC License No. 1531601
- Professional Engineer FL PE License No. 80669
- Professional Engineer CA PE License No. 75093
- Project Management Professional, Cert No 1474518

PROFESSIONAL TRAINING

- 30 Hours OSHA
- Advanced MOT Certification

KEY EXPERIENCE

- Construction Administration
- CPM Scheduling
- Asset Management
- Contract Negotiation
- Strategic Planning
- Estimating and Bids
- Value Engineering
- Quality Assurance
- Business Development
- Clients Relationship
- Procurement
- Leadership

WORK HISTORY

- SAFA Construction LLC.
- SSN Engineering
- Marlin Engineering
- Kimley-Horn and Associates

SUMMARY OF EXPERIENCE

Over Twenty (20) years of professional experience in Civil Engineering and leading all functions of Heavy Civil Construction and Project Management including Contract Administration, Accounting, Planning, Design, Processing, Specs Review, Field Supervision and Operations, Managing Staff, Mentoring young Professionals, Supervising sub-contractors, Budgeting, Scheduling, Progress Reporting and Timely Completion of Projects. Mr. MD's areas of expertise are:

- Manage contracts and completion of several municipal, commercial and private construction projects from a variety range of scopes and in excess of $15 Billion.
- Monitoring the progress of contracts administration including design-build projects.
- Receive and analyze bids after award for turnover to management team.
- Execution of construction including supervision of subcontractors, and awarding sub's subcontracts and major purchase orders with vendors and suppliers.
- Work with Senior VP, operations manager, field and office core personnel to establish planning for job Execution and Logistics.
- Evaluate and maintain cost control and forecasting from beginning and thru the duration of project.
- Coordinates requirements of governing authorities for permits, inspections and final approval of the project with A/E.
- Maintain submittal control, including scheduling, receiving, reviewing, approving and expediting submittals from suppliers and subcontractors to comply with progress of CPM schedule.
- Manages client relations and participate with the development of new business for the company.
- Control invoicing from subcontractors and vendors, including review and approval of schedules of values, pay requisitions and verify compliance of subs with proper insurance coverage.
- Review and monitors QC/QA and safety.
- Supervise and assists in the development of office personnel through mentoring and on-the-job training.
- Effectively manages project close-out tasks and warranty work.

PROJECT EXPERIENCES

- Midtown Miam, Miami Dade County FL - Installation of 26,400 LF of 36" C-900 PVC Pipe, 21,400 LF of 42" HDPE pipe including a new meter station and site work restoration for asphalt, concrete sidewalks, curbing, driveways, installation of new drainage structures, piping valves and appurtenances - $25M

- Marriott at Miami Airport , Miami, FL - Installation of 38,500 LF of 28" HDPE and 9,100 LF of 14" HDPE piping system including 200 LF of 30" DIP pipe and overhead metal bridge, nine (9) Recovery Well Systems connected to 28" header pipe with approx. depth from 70-95 feet. FL - $17.0 M

Dilnahar H. Shuvo, MS, PE
Vice-President

Ms. Shuvo, with eight years of experience, has prepared calculations and plans for the design of highways and streets, including roadway alignments and profiles, signing and striping, lighting, paving, and grading, preforming quantity calculations, design calculations, and project cost estimating, researched standards and specifications and has worked with City, County, State, and Federal manuals utilizing applied software to perform engineering analysis and prepare reports. She also has lighting, sign design and drainage design experience using AGI32, Guide Sign, AutoTurn Analysis and ICPR. Ms. Shuvo has working experience with OpenRoads Designer, MicroStation, AutoCAD, Microsoft Office, HCM 2000, and CORSIM (Version 6.0).

EDUCATION

Master of Science in Civil Engineering, Florida International University (FIU), Florida, 2008

Bachelor of Science in Civil Engineering, Bangladesh University of Engineering & Technology, (BUET), Bangladesh, 2004

REGISTRATION

Professional Engineer #92997, FL

CERTIFICATIONS/TRAINING

Certified, Advanced Work Zone Traffic Control, 2021

Training, FDOT, Specifications Package Preparation, 2016

PROJECT EXPERIENCE

I-95 and Spanish River Boulevard Interchange, Palm Beach County – FDOT District 4

Engineer Intern responsible for assisting in the design for the drainage modifications of Segments 4 and 5. This task was part of the on-going design build project at the I-95 Spanish River Blvd Interchange in Boca Raton, FL. This project included the construction a new two-level interchange, modification of the existing Yamato Road and I-95 interchange, addition of auxiliary lanes from Glades Road to Congress Avenue on I-95 and cross street improvements of Spanish River Blvd. and Yamato Road. This two-level interchange includes coordination with FAA, Boca Airport, City of Boca Raton, and Florida Atlantic University (FAU). This improvement will provide connectivity between FAU, Tri-Rail and I-95 and alleviate daily congestion as well as accommodate traffic generated during events held at the FAU stadium.

Boynton Beach Various Locations, Palm Beach County – FDOT District 4

Project Engineer for this is a federally funded, MPO driven, off-system project to improve mobility along Boynton Beach Blvd. This project has two main corridors with various segments. The first segment runs along Boynton Beach Blvd, the existing travel lanes width will be reduced to provide an 11' and 10' travel lane in each direction with sharrows and an 11' and 15' shared use path. This segment also includes decorative lighting along the corridor. The second segment runs along NE 3rd St, Boynton Beach Blvd, and Ocean Ave providing sharrows. The main items included in the scope are, the accommodation of bicyclists.

City of Oakland Park Lakeside Sidewalks – Various Locations, Broward County – FDOT District 4

Project Engineer for this mobility project consisting of pedestrian improvements for the Lakeside neighborhood. Improvements include filling sidewalk gaps, drainage improvements, and signing and pavement markings.

SR 615/S 25th St from N of Edwards Rd to N of Virginia Ave, St. Lucie County – FDOT District 4

Project Engineer for this RRR project consisting of milling and resurfacing of the existing pavement to extend the service life of the corridor, as well as general highway safety enhancements. The project also includes lighting retrofit at the three signalized intersections and the addition reflectorized backplates.

SR 809/Military Trail from Dyer Blvd to N of Flag Dr, Palm Beach County – FDOT District 4

Project Engineer for this RRR project consisting of milling and

Project Management Institute

THIS IS TO CERTIFY THAT

MD SHAHINUR RAHMAN

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND PERFORMANCE IN ACHIEVING AN ORGANIZATIONAL OBJECTIVE THROUGH DEFINING AND OVERSEEING PROJECTS AND RESOURCES AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional (PMP)®

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE

Tony Appleby
Chair, Board of Directors

Sunil Prashara
President and Chief Executive Officer

PROJECT MANAGEMENT INSTITUTE CORPORATE SEAL 1969 PENNSYLVANIA

PMP® Number: 1474518
PMP® Original Grant Date: 17 December 2011
PMP® Expiration Date: 16 December 2023

Project Management Institute

AdvanceOnline Solutions Online Institute

Certificate of Completion

MD Rahman

has met the online course completion requirements for

OSHA 30-Hour Construction Safety

This student has completed the formal instruction for the 30-Hour Construction Outreach Program. Topics covered in this program were Introduction to OSHA, Managing Safety and Health, Struck-by and Caught-In or Between Hazards, Personal Protective Equipment, Hearing Conservation, Respiratory Protection, Lead and Crystalline Silica, Asbestos, GHS Hazard Communication, Electrical Safety, Hand and Power Tools, Fall Protection, Ladder Safety, Excavations, Scaffolds, Crane Safety, Heavy Equipment, Forklift Safety, Materials Handling, Permit-Required Confined Spaces, Fire Safety, Welding and Cutting, Concrete and Masonry, Steel Erection, and Ergonomics.

As an OSHA Outreach Training Program trainer, I affirm that I have conducted this OSHA Outreach Training Program training class in accordance with OSHA Outreach Training Program requirements. I will document this class to my OSHA Authorizing Training Organization. Upon successful review of my documentation, I will provide each student their course completion card within 90 calendar days of the end of the class. — Rick Gleason

Instructor Rick Gleason
Course ID A0310
Certificate ID 15608_1672064

Date 3/22/2020 7:42:00 AM
Time Online 47:11:32
AdvanceOnline Solutions, Inc.
1811 Bering Drive, Suite 430
Houston, Texas 77057
www.advanceonline.com
(713) 621-1100

AdvanceOnline SOLUTIONS

C2. Reference for Current Projects

Underway Project/Running project (6 projects, Same owner)

Project Title and Location :

Project 1: Single Family Residential Home, 921 Lake Avenue, Lehigh Acres, Fl 33972 (STRAP:21-44-27-04-00016.0230)

Project 2: Single Family Residential Home,1515 East 9th Street, Lehigh Acres, Fl 33972 (STRAP:22-44-27-14-00046.0090)

Project 3: Single Family Residential Home,1218 Mckinley Avenue, Lehigh Acres, Fl 33972 (STRAP: 16-44-27-01-00002.0050)

Project 4: Single Family Residential Home,813 Clayton, Lehigh Acres, Fl 33972 (STRAP-21-44-27-01-00002.0190)

Project 5: Single Family Residential Home,815 Clayton, Lehigh Acres, Fl 33972 (STRAP-21-44-27-01-00002.0200)

Project 6: Single Family Residential Home,816 Maple Avenue, Lehigh Acres, Fl 33972 (STRAP-21-44-27-03-00011.0040)

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 1.2 Millon, March 2022 ($200,000 for each house)
Percent Complete : 98%
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : October, 2023

Name, Address and Telephone Number of Owner :
SARAH REAL ESTATE INVESTMENTS
6073 NW 167TH ST #C2
HIALEAH FL 33015
Owner of the organization:
Aniss Naanaa
(305) 303-3501
sarahtrading01@gmail.com

Designing Engineer and Address
LIS Engineering, LLC
21430 Palm Beach Blvd, Alva, FL 33920
(239) 693-9244

Reference for Completed project.

Project: 1

Project Title, Location, and Brief Description of Work Performed
Fence Upgrade Project - 2022
This project's scope is to replace the existing chain link fence with an eight-foot (8’) wrought-iron picket fence.
Sherbondy park
380 Bahman Ave, Opa-locka, FL 33054

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 214,500 , July 2022
Date Complete : December 2022
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : Project already completed

Name, Address, Email address and Telephone Number of the Owner
City of Opa-Locka
Contact Person :
Carlos Gonzalez
CIP Project Manager, City of Opa-locka
Office: 305-953-2868 Ext 1451
Cellular: 305-986-3586
Email: cgonzalez@opalockafl.gov

Capital Improvements Program
780 Fisherman Street, 4th Floor
Opa-locka, FL 33054

Designing Architect/Engineer and Address:
Architect
2Plus Architect
260 Andalusia Ave, Coral Gables, FL 33134
Engineer :
SSN Enginering LLC
13899 Biscayne Blvd, North Miami Beach, FL 33181

Reference for Completed project.
Project: 2

Project Title, Location, and Brief Description of Work Performed
Fence Upgrade Project - 2023
This project's scope is to replace the existing chain link fence with an eight-foot (8') wrought-iron picket fence.
Ingram Park
2100 Burlington St, Opa-locka, FL 33054

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 158,140 , January 2023
Date Complete : September 2023
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : Project already completed

Name, Address, Email address and Telephone Number of the Owner
City of Opa-Locka
Contact Person :
Carlos Gonzalez
CIP Project Manager, City of Opa-locka
Office: 305-953-2868 Ext 1451
Cellular: 305-986-3586
Email: cgonzalez@opalockafl.gov

Capital Improvements Program
780 Fisherman Street, 4th Floor
Opa-locka, FL 33054

Designing Architect/Engineer and Address:
Architect
2Plus Architect
260 Andalusia Ave, Coral Gables, FL 33134
Engineer :
SSN Engineering LLC
13899 Biscayne Blvd, North Miami Beach, FL 33181

Reference for Completed project.
Project: 3

Project Title, Location, and Brief Description of Work Performed
Public Works Canopy Project
City of Lauderdale Lakes, FL
4300 N.W. 36th Street
Lauderdale Lakes, FL, 33319

Contractor or Sub-Contractor : Contractor
Contract Amount and Date of Contract : 100,000 , June 2023
Date Complete : October 2022
Project Manager or Superintendent : MD Shahinur Rahman, PE
Required Completion Date : Project already completed
Name, Address, Email address and Telephone Number of the Owner
City of Lauderdale Lakes, FL

Contact Person :
Maqsood M Nasir, P.E. Director, Engineering Services & Construction Management
City of Lauderdale Lakes,
4300 NW 36th Street,
Lauderdale Lakes, FL 33319,
V: 954-535-2712

Designing Architect/Engineer and Address:
Engineer :

City of Lauderdale Lakes, FL
4300 N.W. 36th Street
Lauderdale Lakes, FL, 33319

Site pictures our Sub-Contractor



24" culvert installed

by AC TRENCH, CORP



42" culvert installed

by AC TRENCH, CORP

Site pictures for minor similer work by Safa Construction



Safa installed 18" RCP in six
(6) different locations





Safa restore pond bank for a private owen.
Contract cost : Five thousand



Safa intalled concete in Nine (9) different locations

Note: In this project Safe is not installed by culvert or restore the canal bank. This task will be done by the sub. Safa will installed the concrete pavement on top of the culvert.

C3. RESOURCES AND APPROACHES

Resources :

Safa consists of full of adequate resources for this project. In this project, most of work will be done the skilled subcontractor, who are working on this type of project for their living. The resource subdivisions are many based on different management organizations. It is our understanding in this project four (4) type of resources is significant. 1) Human resources 2) Material resources 3) Equipment resources 4) Financial resources/capacity.

1) Human resources: Safa Construction is full of capable and skilled labor firms. Two Professional Engineers will consciously assist the workers, guide them, and inspect their work. Safa has also a highly skilled project manager/ superintend who will coordinate with workers for their work and safety. See the list of major subcontractors for subcontractor information.
2) Material resources: Safa Construction will purchase all the materials as specified in the plan.
3) Equipment resources: Safa mostly rented the equipment from commercial equipment rental places. Safa has commercial accounts with equipment rental places.
4) Financial resources/capacity:

   1) Currently the SAFA construction has a working capital of 1.5M dollars.
   2) Bonding capacity of 3.5 million dollars.
   3) SAFA construction is a comparatively new company. However, in this short amount of time, we completed eight (8) public projects and six (6) single-family homes (finishing in November 2023). The net project cost for all of the projects is 1.7 million dollars. This is a proven record of financial stability and the flourishing of the company.

Approaches: (See the attached sketch below)



1) PHASE I –MOBILIZATION

STEP –1 INITIATE MOBILIZATION.

STEP –2 VERIFY EXISTING UTILITY AND PROTECT THOSE.

STEP –3 VERIFY PROPOSED AND EXISTING ELEVATION.

STEP –4 SHOP DRAWING SUBMITTAL.

STEP 5– INSTALL A TEMPORARY FENCE.

NO.	REVISIONS	DATE	BY

SAFA CONSTRCTION, LLC
11186 SW 17TH MNR
DAVIE, FL 33324
PH (954) 326-8295

SAFA CONSTRUCTION, LLC

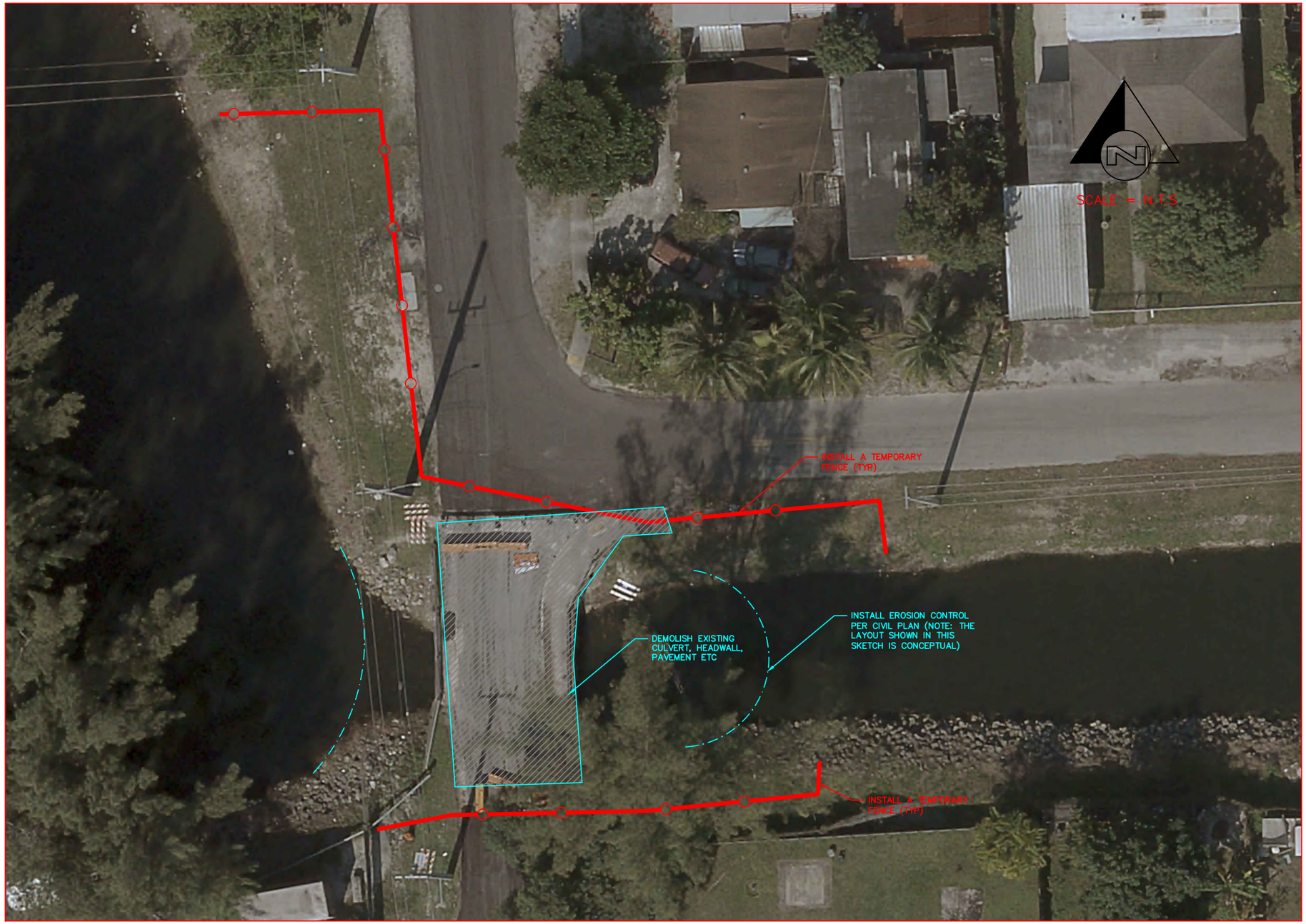
PROJECT NO.

2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -1



2) PHASE II –DEMOLITION (ASSUMING WET CONSTRUCTION)

STEP –1 INSTALLATION OF ALL EROSION CONTROL MEASURES.
STEP –2 REMOVE/DEMOLISH EXISTING CONCRETE PAVEMENT, HEADWALL, AND CULVERT PIPING.

NO.	REVISIONS	DATE	BY

SAFA CONSTRCTION, LLC
11186 SW 17TH MNR
DAVIE, FL 33324
PH (954) 326-8295

SAFA CONSTRUCTION, LLC

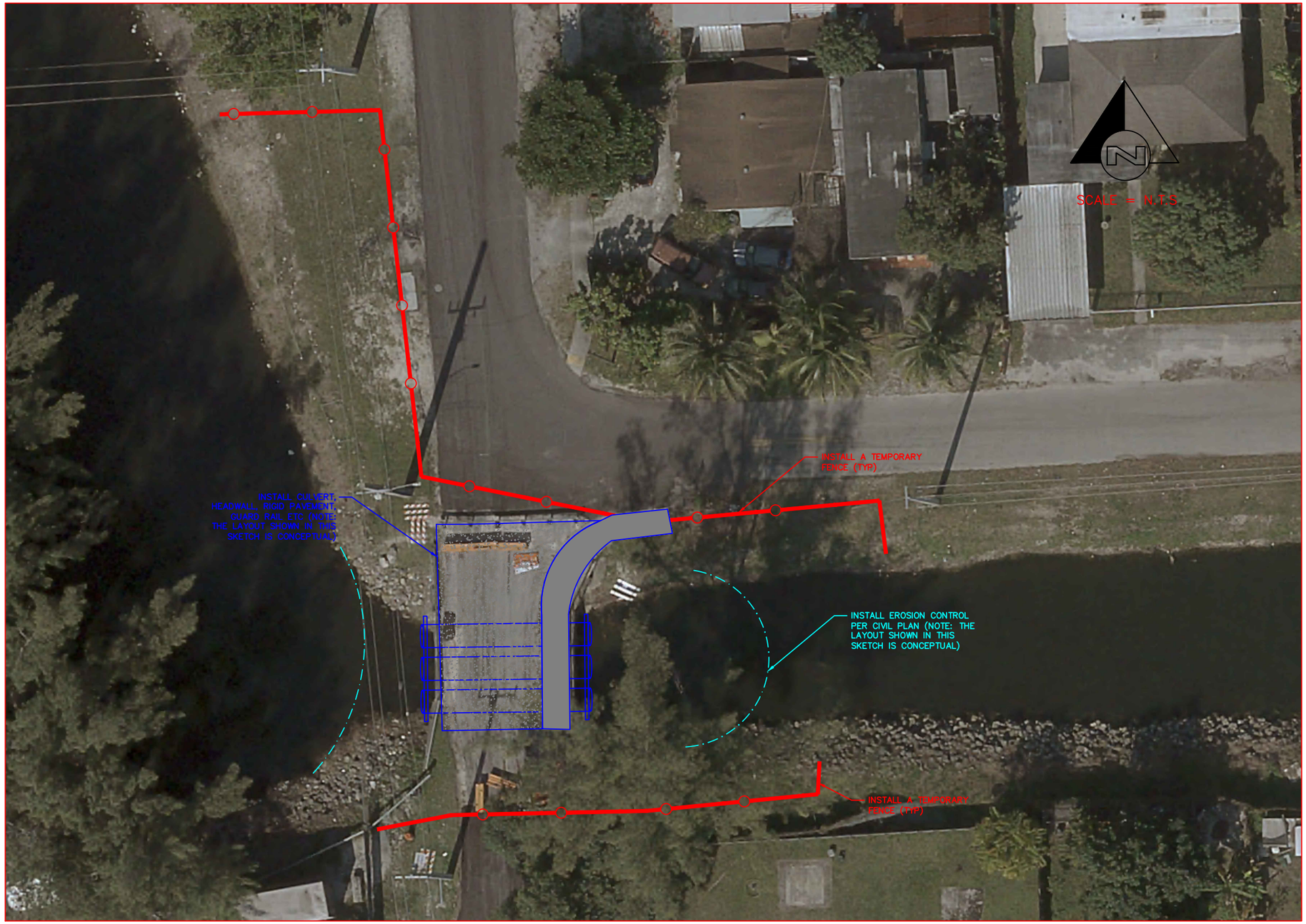
PROJECT NO.

2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -2



3) PHASE III

STEP -1 INSTALL BACKFILL AND CULVERTS.
STEP -2 INSTALL CONCRETE HEADWALL AT PIPE ENDS AND INSTALL SAND CEMENT BAGS.
STEP -3 INSTALL NEW CONCRETE SHOULDER BARRIER AND GUARD RAILS.
STEP -4 SIDEWALK AND RIGID PAVEMENT

NO.	REVISIONS	DATE	BY

SAFA CONSTRCTION, LLC
11186 SW 17TH MNR
DAVIE, FL 33324
PH (954) 326-8295

SAFA CONSTRUCTION, LLC

PROJECT NO.
2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -3



4) PHASE IV

STEP –1 MILL AND RESURFACE THE TOP 1" SURFACE COURSE OF THE ROADWAY AND RESTORE PAVEMENT MARKING.

STEP –2 DEMOBILIZATION AND RELATED CLOSEOUT ACTIVITIES.

NO.	REVISIONS	DATE	BY

SAFA CONSTRCTION, LLC
11186 SW 17TH MNR
DAVIE, FL 33324
PH (954) 326-8295

SAFA CONSTRUCTION, LLC

PROJECT NO.
2023-XXX

CITY OF OPA-LOCKA – SESAME STREET CULVERT REPLACEMENT BETWEEN NW 135TH ST. & ATLANTIC AVE
RFP NO: 23-1016200
MIAMI DADE COUNTY FLORIDA

CONCEPTUAL LAYOUT OF CONSTRUCTION APPROACH

DRAWN BY:
CHECKED BY:
DATE:
SHEET NO.
PHASE -4

C4. Schedule

1) **Demolition…….. 1 week**
2) **Installation of the culvert, head wall etc…….. 3 week**
3) **Installation rip-rap…….……..…2 week**
4) **Installation of Rigid pavement……...1 week**
5) **Installation of flexible pavement……1 week**

Total 8 week or 2 months

Note: Schudel compression (Combination of schedule crashing and fast-tracking) technique has been applied to the process faster.

C5. Price Proposal

THE CITY OF OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

TO THE COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA

Ladies and Gentlemen:

The undersigned bidder proposes to furnish all labor, tools, material and supplies, and to sustain all the expense incurred in doing the work set forth below that may be awarded the undersigned by the City of Opa-Locka, Florida, through its proper officers, and to do the same strictly in accordance with the plans and contract documents on file in the Office of the City Engineer of Opa-Locka, which are referred to below and made a part hereof, at the following combination of lump sum prices:

Item No.	Estimated Quantity	Description	Total
1.	Lump Sum (Divided into 2 or 4 payments See Measurement and Payment for Conditions)	For performing preparatory work and operations in mobilizing for beginning the work of the Project, but excluding materials and permit costs, both of which are paid under other payments items, the lump sum of _____ Dollars and _____ Cents	$ 20,000.00
2.	130 LF	For selling and delivering to the City 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert installation, the price per linear foot of 200.00 Dollars and Cents	$ 26,000.00

3.	130 LF	For installing 66-inch SRASP pipe and joints by Contech, or approved equal, for the three (3) barrel culvert, price per linear foot of 800.00 Dollars and Cents	$ 104,000.00

Item No.	Estimated Quantity	Description	Total
4.	75 LF	For selling and delivering to the City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of 100.00 Dollars and Cents	$ 7,500.00
5.	75 LF	For installing City General Guardrail per FDOT index No. 400 with mechanical appurtenances required, the price per linear foot of 200.00 Dollars and Cents	$ 15,000.00
6.	Lump Sum	For demolition and removal of existing three (3) 66-inch concrete pipe culvert with headwalls and retaining walls, the lump sump of _____ Dollars and Cents	$ 300,000.00
7.	670 CY	For the excavating of existing backfill material at existing Culvert location, the price per cubic yard of 150.00 Dollars and Cents	$ 100,500.00

8.	Lump Sum	For providing adequate bypass pumping to maintain uninterrupted Canal flow during construction, the price per lump sump of _____ Dollars and Cents	$ 50,000.00

Item No.	Estimated Quantity	Description	Total
9.	100 LF	For furnishing and installing all necessary Turbidity Barriers for erosion control measures specified on plans, the price per linear foot of 20.00 Dollars and Cents	$ 2,000.00
10.	2 Each	For furnishing and installing all necessary Drop Inlet Sediment Protection for erosion control measures specified on plans, the per unit of 5000.00 Dollars and Cents.	$ 10,000.00
11.	45 CY	For selling and delivering to the City Concrete for the installation of 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, the price per cubic yard of 350.00 Dollars and Cents.	$ 15,750.00
12.	45 CY	For constructing 10-inch thick Concrete Pavement (min. 3,000 psi at 28-day) per FDOT index No. 350, as indicated in the Plans, the price per cubic yard of 150.00 Dollars and Cents.	$ 6,750.00

13.	405 SF	For furnishing and constructing 4-inch thick sidewalk and ramp curbing to match existing per FDOT index No. 310, the price per square foot of 5.00 Dollars and Cents.	$ 2,025.00

Item No.	Estimated Quantity	Description	Total
14.	150 SF	For constructing new concrete curb and gutter per FDOT index No. 300, the price per square foot of 10.00 Dollars and Cents.	$ 1,500.00
15.	200 CY (Contingent Item)	For furnishing and placing suitable Backfill (A-24 or better) required for Culvert placement, the price per cubic yard of 250.00 Dollars and Cents.	$ 50,000.00
16.	280 TON	For furnishing and installing Rubble (Broken Stone), including filter fabric, at Culvert embankment for the rip-rap installation as per FDOT Standard Specification No. 530, the price per ton of 1200.00 Dollars and Cents.	$ 336,000.00

17.	25 CY	For furnishing and installing sand-cement rip rap bags at culvert pipe ends per Miami-Dade County DTPW BC 3.4 & BC 3.5 for straight end pipes, the price per cubic yard of 500.00 Dollars and Cents.	$ 12,500.00

Item No.	Estimated Quantity	Description	Total
18.	45 CY	For furnishing and constructing concrete endwall for three (3) 66” barrel culvert installation as per FDOT index 430-032, the price per cubic yard of 500.00 Dollars and Cents.	$ 22,500.00
19.	65 LF	For furnishing and installing concrete shoulder barrier as per FDOT index No. 521-001, the price per linear foot of 200.00 Dollars and Cents.	$ 13,000.00
20.	1025 SY	For milling (nominal 1 inch thick), surface course for permanent paving repairs, the price per square yard of 18.00 Dollars and Cents.	$ 18,450.00
21.	1025 SY	For constructing for Type “V” permanent paving repairs as per details provided in plans, the price per square yard of 9.00 Dollars and Cents.	$ 9,225.00

22.	8 each	For replacing pavement markings damaged, removed, or obliterated by the contractor's operation, the price per unit of 150.00 Dollars and Cents.	$ 1,200.00

Item No.	Estimated Quantity	Description	Total
23.	40 SY (Contingent Item)	For restoring sodded area, the price per square yard of 100.00 Dollars and Cents.	$ 4,000.00
24.	Lump Sum	For providing full Traffic Control during construction, Maintenance of Traffic, the lump sum price of 5000.00 Dollars and Cents.	$ 5,000.00
25.	2100 SF (Contingent Item)	For sheeting and shoring ordered left in place by the Engineer, the price per square foot of 10.00 Dollars and Cents.	$ 21,000.00
26.	670 CY (Contingent Item)	For removal, transport and legal disposal of unsuitable backfill materials, including tipping fees, the price per cubic yard of 100.00 Dollars and Cents.	$ 67,000.00

27.	**Sub-Total – Bid Items 1 through 26**	**$** 1,220,900.00	
Item No.	Estimated Quantity	Description	Total
28.	Dedicated Allowance	For providing uniformed, off-duty policemen for the purpose of maintenance of traffic, the aggregate sum of 50.00 Dollars and Cents.	$ 24,000.00
29.		For all cost of required permit fees, impact fees, if required by the Engineer, the sum of 3% of the Subtotal, Item 27 (0.03) x (Subtotal, Item 27) _____ Dollars and Cents.	$ 36,627.00
30.		For unforeseen conditions, for minor construction changes and for quantity adjustments, if ordered by the Engineer, the sum of 10% of the Subtotal, Item 27 (.10) x (Subtotal, Item 27) _____ Dollars and Cents.	$ 122,090.0

31.	**TOTAL BID – (Sum of Bid Item Nos. 27, 28, 29 and 30)**	$ 1,403,617.00	

Note: For a detailed description of each Quotation Item, refer to Section 01025 of the Specifications entitled "Measurement and Payment.

THE CITY OF OPA-LOCKA OPA-LOCKA, FLORIDA

BID PROPOSAL FORM

The City of Opa-Locka reserves the right to waive any informality in any bid and to reject any or all bids.

TOTAL BASE BID PRICE FOR PROPOSAL (ITEMS 1 THROUGH 32): $ 1,403,617.00
(FIGURES)

One million four hundred thousand three thousand six hundred seventeen Dollars and

zero Cents

AMOUNTS SHALL BE SHOWN ON BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT SHOWN IN WORDS SHALL GOVERN FOR EACH BID ITEM AND TOTAL BASE BID.

Bidder acknowledges that included in the various items of the bid proposal and in the TOTAL BASE BID PRICE are costs for complying with the Florida Trench Safety Act, F.S. 553.60 et. seq. The Bidder by signing and submitting the Trench Safety Act Compliance Statement is, in writing, assuring that it will perform any trench excavation in accordance with applicable trench safety standards.

Contract award shall be based upon the total base bid price, as identified above, by the lowest responsive, responsible bidder.

SAFA CONSTRUCTION LLC

FIRM NAME (PRINT)

BIDDER'S SIGNATURE

SAFA CONSTRUCTION, LLC

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

November 8, 2023

Darvin William JD, MBA, MPH

Interim City Manager, City of Opa-Locka

780 Fisherman Street

Opa-Locka, FL 33054

Subject: Revised price proposal for Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave (RFP NO: 23-1016200)

Dear Darvin,

I hope this letter finds you in good health and high spirits. I am writing to formally submit a revised price proposal for the Sesame Street Culvert Replacement between NW 135th St. & Atlantic Ave (RFP NO: 23-1016200) bid, which was previously tendered to your office on September 17,2023. I appreciate the opportunity to participate in this bid, and after careful consideration and further evaluation, I believe that the revised proposal will better align with the needs and expectations of our esteemed city.

Upon a thorough review of the project requirements, as well as discussions with city officials (Microsoft Teams meeting-Tuesday, October 31, 2023, 9:30 AM-10:00 AM) and with my team, and careful analysis of our cost estimates, I have identified several areas where we can offer a more competitive and cost-effective proposal without compromising the quality or integrity of our work. Our commitment to delivering value to the city remains unwavering, and we believe that the revisions we have made will better reflect our dedication to your community.

To facilitate a clear understanding of the changes we have made, we have prepared a detailed item-by-item comparison between the original and revised price proposals. The following table illustrates the differences:

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

Comparison table :

Item No	Description	Original Proposal ($)	Revised Proposal ($)	Comments
1	Mobilization (LS)	20,000.00	20,000.00	No Change
2	Material Cost-Pipe	26,000.00	26,000.00	No Change
3	Labor & Equipment Cost-Pipe	104,000.00	104,000.00	No Change
4	Material Cost-Guardrail	7,500.00	7,500.00	No Change
5	Labor Cost-Guardrail	15,000.00	15,000.00	No Change
6	Labor & Equipment Cost-Demo	300,000.00	300,000.00	No Change
7	Labor & Equipment Cost-Excavation	100,500.00	100,500.00	No Change
8	By-pass(LS)	50,000.00	50,000.00	No Change
9	Labor & Material Cost-Turbidity	2,000.00	2,000.00	No Change
10	Labor & Material Cost-Drop inlet	10,000.00	10,000.00	No Change
11	Material Cost-Concrete	15,750.00	15,750.00	No Change
12	Labor Cost-Concrete	6,750.00	6,750.00	No Change
13	Labor & Material Cost-Side walk	2,025.00	2,025.00	No Change
14	Labor & Material Cost- Curb & Gutter	1,500.00	1,500.00	No Change
15	Labor & Material Cost-Backfill	50,000.00	50,000.00	No Change
16	Labor, Material & Equipment Cost-Rubble	336,000.00	300,000.00	See Note # 1
17	Labor, Material & Equipment Cost-Sand-Cement	12,500.00	12,500.00	No Change
18	Labor, Material & Equipment Cost-Endwall	22,500.00	22,500.00	No Change
19	Labor & Equipment Cost-Shoulder Barrier	13,000.00	13,000.00	No Change
20	Labor & Equipment Cost-Mill & Resurface	18,450.00	18,450.00	No Change
21	Labor, Material & Equipment Cost-Paving	9,225.00	9,225.00	No Change
22	Labor, Material & Equipment Cost-Pavement marking	1,200.00	1,200.00	No Change
23	Labor & Material Cost-Re-sod	4,000.00	4,000.00	No Change
24	MOT (LS)	5,000.00	5,000.00	No Change
25	Sheeting and shoring	21,000.00	21,000.00	No Change
26	Labor & Equipment Cost-Removing unsuitable material (LS)	67,000.00	46,100.00	See Note # 2
26-A	Bonding Cost	0.00	36,000.00	See Note # 1
27	**Subtotal**	**1,220,900.00**	**1,200,000.00**	
28	Police (LS)	24,000.00	0.00	See Note # 3
29	Permit fee	36,627.00	0.00	See Note # 4
30	Unforeseen	122,090.00	0.00	See Note # 5
Total-Bid		**1,403,617.00**	**1,200,000.00**	

SAFA CONSTRUCTION, LLC
Phone: (954) 326-8295
Email: md.rahman@safaconstruction.net

Note for revisions in our proposal:

1) In the original bid, there was no separate line item for Bonding cost, so bonding cost was included in line item number 16, and in the revised price proposal bonding cost is shown separately in item number 26-A for clarification.
2) During the re-site visit to the construction site, we identified that unsuitable material in the canal would not be that much.
3) We feel that we do not police guard during construction. I have been working with the city past 10 years, I never felt that I needed a police guard to work in the city. So, the cost is deleted.
4) This is the city's project within its own city limit. So, the city can handle this issue internally as it was done for other projects.
5) Unforeseen conditions are unpredictable and non-measurable. The city can keep the cost for this line item internally as it was for other standard projects.

In this comparison table, we have outlined the specific items, their descriptions, the original pricing, the revised pricing, and the cost savings achieved in the revised proposal. We believe this breakdown provides transparency and demonstrates our commitment to offering the best value for the city.

We are confident that the revised proposal reflects our dedication to delivering a competitive and cost-effective solution for the city. Our team remains fully committed to collaborating closely with your office to ensure the successful execution of this project, should our proposal be accepted.

If you have any questions or require further clarification regarding the itemized comparison or any other aspects of the proposal, please feel free to contact me directly at (954) 326-8295 or via email at md.rahman@safaconstruction.net . We are eager to engage in discussions and provide any additional information or documentation as needed.

We would like to express our sincere gratitude for your consideration of our proposal and for your dedication to selecting the best value for the city. We are enthusiastic about the opportunity to contribute to the continued growth and development of our community and look forward to the possibility of working closely with your office to realize this vision.

Thank you for your time and attention, and I eagerly await your response.

Sincerely,

MD Shahinur Rahman, CGC, PMP, MS, PE (CA, FL)

PRESIDENT /CEO

SAFA CONSTRUCTION, LLC

SBE | CBE

Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, RATIFYING A GRANT APPLICATION THAT WAS SUBMITTED TO THE FLORIDA DEPARTMENT OF TRANSPORTATION FOR THE TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, on November 27, 2023, the City of Opa-Locka ("City") submitted a grant application to the Florida Department of Transportation relating to a grant for Non-Motorized Transportation Alternatives under the Transportation Alternatives Plan to enhance mobility and provide accommodations for pedestrians and bicyclists; and

WHEREAS, the amount of funding requested was One Million Dollars ($1,000,000.00), with a required City match of Two Hundred Fifty Thousand Dollars ($250,000.00) for a total project cost of One Million, Two Hundred Fifty Thousand Dollars ($1,250,000.00)); and

WHERAS, the City's goal is to implement the proposed enhancements to mobility in the downtown area of the City, which consists of the creation of bikeways, traffic calming devices, pedestrian crossings and paths, traffic signals, as well as signs and pavement marking; and

WHEREAS, the submission period for the Transportation Alternative Program Grant Application began November 16, 2023, and closed on December 6, 2023 but due to the cancellation of the Regular Commission Meeting on November 22 ,2023, the request was not timely brought before the City Commission for approval; and

WHEREAS, the Interim City Manager is now seeking ratification of the grant applicaton; and

WHEREAS, the City Commission finds it in the best interests of the City and its residents to ratify the grant application, as described herein.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

SECTION 2. The City Commission of the City of Opa-Locka, Florida, hereby ratifies the submission of the grant application to the Florida Department of Transportation for Transportation Alternatives Set-Aside Program Funding.

SECTION 3. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the Interim City Manager, following review by the City Attorney and without need of

public hearing, by filing a corrected copy of same with the City.

SECTION 4. This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:
Commissioner Bass _____
Commissioner Kelley _____
Commissioner Williams _____
Vice Mayor Ervin _____
Mayor Taylor _____

DocuSign Envelope ID: 97220385-7013-4CC9-BE8B-5ADC6C6E1377

City of Opa-locka
Agenda Cover Memo

Department Manager:	Adelina Gross			**Department Manager Signature:**	DocuSigned by: C46C07C1E8DE492...		
City Manager:	Darvin Williams			**CM Signature:**	Adelina Gross		
Commission Meeting Date:	01.10.2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**
				X			
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**
		X	**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		X
Funding Source: *Account#:*	*(Enter Fund & Dept.)* Ex:		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**
							x
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**		*N/A*		
	X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*		
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐				
Sponsor Name	City Manager		**Department:**		Capital Improvements Program		

Short Title:

RATIFICATION OF GRANT APPLICATION TRANSPORTATION ALTERNATIVES PROGRAM 2024 FLORIDA DEPARTMENT OF TRANSPORTATION (DISTRICT 6).

Staff Summary:

The City of Opa-locka has applied for a grant provided by the Florida Department of Transportation, which provides grants for Non-Motorized Transportation Alternatives under the Transportation Alternatives Plan to enhance mobility and provide accommodations for pedestrians and bicyclists. The amount of funding being requested is $1,000,000.00 with a required City match of $250,000.00 for a total project cost of $1,250,000.00.

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The City's goal is to implement the proposed enhancements to mobility in the downtown area of the City of Opa-locka Downtown Master Plan which consists of the following:

-Creation of Bikeways
-Addition of Traffic Calming Devices
-Pedestrian Crossing and Paths
-Traffic Signals
-Signs and Pavement Marking

The submission period for the Transportation Alternative Program Grant Application began November 16, 2023, and closes on December 6th, 2023. Due to the cancellation of the Regular Commission Meeting on November 22nd,2023, this agenda item was unable to be presented to the City Commission.
City Administration is now seeking ratification.

Financial Impact

If the City is approved to receive this grant, it will be received in FY 30 and in the interim will be incorporated into the City's Long-Term CIP Plan.

Proposed Action:

Staff recommends the City Commission ratify the submission of a grant application Transportation Alternative Application as part of the Opa-locka 2030 Comprehensive Plan adopted by the City Commission in 2021.

Attachment:

1. Submitted Application

TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM (TA) FUNDING APPLICATION

DRAFT

A continuation of the Surface Transportation Block Grant, TA funding is by contract authority from the Highway Trust Fund, subject to the overall federal-aid obligation limitation determined by the Federal Highway Administration (FHWA). Projects must support surface transportation, be competitively solicited, and comply with the provisions of the FDOT Work Program Instructions and the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (IIJA) [§ 11109; 23 United States Code (U.S.C.) 133(h)]. District representatives may be contacted for guidance.

PART 1 – APPLICANT INFORMATION

1. **Applicant Agency Sponsor Type.** Select the box indicating the agency of the person who can answer questions about this project proposal. Then complete applicable text fields. Note: State-recognized non-profit agencies may partner with an eligible governmental entity but are not eligible as a direct grant recipient.

Checkbox next to each of the following types of agencies that do not indicate text field. Document allows one selection.

- ● Local government (e.g., county, city, village, town, etc.).
- ○ Regional transportation authority or transit agency.
- ○ Natural resource or public land agency.
- ○ School district, local education agency, or school (may include any public or nonprofit private school). Projects should benefit the public and not just a private entity.
- ○ Recognized Tribal Government.
- ○ Other local or regional governmental entity with oversight responsibility for transportation or recreational trails, consistent with the goals of 23 U.S.C. 133(h).
- ○ Metropolitan / Transportation Planning Organization / Agency (collectively MPO) (only for urbanized areas with less than 200,000 population).
- ○ FDOT (only by request of another eligible entity, then enter the requesting entity). If "checked", enter the requesting entity in the space provided. (Word limit 5)

2. **Agency name of the applicant.** (Word limit 5).

   City of Opa-locka

3. **Agency contact person's name and title.** (Word limit 5).

   Adelina Gross CIP Manager

4. **Agency contact person's telephone number and email address.** (Word limit 5).

   305 953-2868 ext. 3001 agross@opalockafl.gov

PART 2 – LOCAL AGENCY PROGRAM (LAP) CERTIFICATION

LAP is FDOT's primary mechanism to provide governmental subrecipients with federal funds to develop transportation infrastructure facilities through cost-reimbursement (grant) agreements. This legal instrument (the grant agreement) will describe intergovernmental tasks to be accomplished and the funds to be reimbursed for selected projects. The FDOT Local Programs Manual and FDOT Procedure 525-010-300 provides details for local agencies to complete a certification process that is a risk-based assessment evaluating whether they have sufficient qualifications and abilities "to undertake and satisfactorily complete the work" for infrastructure projects. Non-profit organizations are not eligible for LAP certification, local agencies are not eligible for certification of Project Development and Environment (PD&E) or Right-of-Way (ROW) acquisition phases. FDOT is required to provide oversight on fee-simple and less-than-fee ROW acquisition phases, including license agreements, encroachment agreements, perpetual easements, temporary construction easements, and donations.

○ **LAP Full Certification**

Provide:

Approval Date: and Expiration Date:

Responsible Charge Name:

○ **LAP Project Specific Certification**

Provide:

Approval Date: Project FM(s) Number:

Responsible Charge Name:

○ **Not LAP Certified – A LAP Certified Agency will deliver the project on behalf of the uncertified Agency.**

Provide:

Sponsoring Agency Name: Contact Name:

Address: Phone:

○ **Not LAP Certified - FDOT District will administer the project.**

Provide:

FDOT Contact Name: Phone:

● **Not LAP Certified – the Agency will become LAP certified 1 year prior to the delivery of the LAP project.**

○ **Not Applicable – this is a Non – Infrastructure Project.**

PART 3 – PROJECT INFORMATION

1. **Project Name / Title:** (Word limit 15).
   City of Opa-locka Non-Motorized Improvements (Bicyclist and Pedestrian Infrast

2. **Is this a resubmittal of a previously unfunded project?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the year(s) of submittal(s) and include project title(s), if different, in the space provided. (Word limit 5).
   ○ Yes ● No

3. **Does this project connect a previously funded project(s)?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the Financial Management (FM) number(s) and provide a brief description of the other related FDOT-funded phases that are complete, underway, or in the FDOT 5-year Work Program. (Word limit 5).
   ○ Yes ● No

4. **Is funding requested for this same project from another source administered by FDOT?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate funding source(s) / application(s) submitted. NOTE: Contact your district representative to discuss if this same project is partially funded in the 5-year Work Program or if FDOT has received another application for funding it. (Word limit 5).
   ○ Yes ● No

5. **What are you proposing in this application?** In 200 words or less, provide a description of the project and what it will accomplish. The description should allow a person without prior knowledge of the project to clearly understand it. Summarize the purpose, need, project attributes, the relationship to surface transportation, how the project improves safety, and expected benefits.

   The City of Opa-locka is a 4.5 square mile community located in northwest Miami-Dade County. The proposed Transportation Improvements for cyclists will help to achieve the safety goals and make everyday travel better, Opa-locka is developing citywide interconnected corridors, parking, pedestrian and traffic signage, and programs. Designing our transportation system to better accommodate bicyclists and pedestrians will help to resolve multiple complex and interrelated issues, including traffic congestion, air quality, climate change, public health, and livability. Opa-locka recognizes that bicyclists and pedestrians are vulnerable road users making up about 76 percent of all traffic fatalities statewide. When involved in a traffic collision, cyclists are seriously injured or killed over 69 percent of the time. Vision and goals: Make bicycling safe, convenient, and accessible for all ages and abilities. providing equity, and safety, increasing the number and multimodal trips (mode shift), and being responsive and accountable to our community and county-wide needs providing accessibility for our underserved and pollution burdened residents who are more dependent on active transportation. The scope of work of this project is to incorporate bike lanes, signals, and dynamic pedestrian crossing with flashing beacons at the following corridors: Sharazad Blvd, Opa-locka Blvd, Ali Baba Ave, and, Perviz Ave.

REQUIRED UPLOAD: PROJECT INFORMATION SUPPORTING DOCUMENTATION including 1) Scope of Work clearly describing the purpose and need for this project and the desired outcome; detailed description of the existing conditions; and detailed description of the proposed project and major work item improvements (e.g., project limits (begin / end), width of sidewalks or trails and other components, materials, drainage, lighting, signing and pavement markings, etc.). 2) Intent to enter into a cost reimbursement agreement for delivering the project. 3) Signed PROJECT CERTIFICATION from the maintaining agency confirming the applicant is authorized to submit the proposal, the information is accurate, intent to enter into a Memorandum of Understanding or Interagency Agreement for ongoing operations and maintenance of the improved facility, and compliance with all federal and state requirements.

PART 4 – PROJECT LOCATION

1. **Indicate the municipality(ies) of the project location.** (Word limit 5).

   City of Opa-locka

2. **Indicate the county(ies) of the project location.** (Word limit 5).

   Miami-Dade County

3. **Roadway Classification**

   ○ Yes ○ No State roadway (on-system)

   ○ Yes ○ No Federal roadway

   ● Yes ○ No Local roadway (off-system)

4. **Indicate the roadway name(s) [including applicable state, federal, county road number(s), local roadway name, and roadway identification number (e.g., SR 5 / US 1 / CR 904 / Overseas Highway / ID number: 90040000)].** (Word limit 10).

   Opa-locka Boulevard, Ali Baba Avenue, Sharazad Boulevard, S Perviz Avenue

5. **Indicate the roadway beginning project limits (south or west termini), mile points, and crossroads at each end of each listed segment.** (Word limit 10).

   Sharazad Blvd. Perviz Avenue, Ali Baba Avenue Opa-locka Blvd.

6. **Indicate the roadway ending project limits (north or east termini), mile points, and crossroads at each end of each listed segment.** (Word limit 10).

7. **Indicate the total project length, in miles and linear feet.** (Word limit 10).

   3.28 lane miles and 17,380.40 linear feet

8. **Does the project involve the Florida Shared-Use Nonmotorized (SUN) Trail network?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the trailway identification number, beginning and ending mile points. (Word limit 5).

   ○ Yes ● No N/A

9. **Within the next five years, are non-FDOT funds being expended within the limits or adjacent to the proposed project?** If not, select "no" and indicate N/A in the space provided. If so, select "yes", and briefly explain. (Word limit 50).

   ● Yes ○ No Yes, local funds for ADA Access Improvements, sidewalk connections.

PART 5 – PROJECT TYPE

NOTE: Certain areas may not be prioritizing Non-infrastructure (NI) proposals or all eligible infrastructure activities (or may recommend bundling activities together). Contact your district representative for guidance.

1. **PROJECT CATEGORY** Select one box that best represents the project proposal. Then, complete either the "Infrastructure" or "NI" selections.

- **A. Infrastructure.** If so, select "yes", then select the most appropriate "infrastructure" eligible activity from listing below. (Pages range 5-6)

- **B. Non-infrastructure (NI).** If so, select "yes", then select the most appropriate NI eligible activity from the listing following the Infrastructure activities. (Page range 7)

5-A. INFRASTRUCTURE ELIGIBLE ACTIVITY

Select one box that best represents the project proposal). As applicable, complete infrastructure eligible text fields.

- **Pedestrian and / or Bicycle facilities** (Select this box for construction, planning, and design of off-road trail facilities or on-road facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation).

Safe Routes for Non-Drivers (Select this box for construction, planning, and design of infrastructure related projects and systems that provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs).

Conversion of Abandoned Railway Corridors to Trails (Select this box for conversion and use of abandoned railroad corridors into trails for pedestrians, bicyclists, or other nonmotorized transportation users).

Scenic Turnouts and Overlooks (Select this box for construction of turnouts, overlooks, and viewing areas). If "yes", list any Florida Scenic Byways visible from the project or indicate N/A in text field. (Word limit 5).

Outdoor Advertising Management (Select this box for inventory, control, or removal of outdoor advertising). If "yes", list any Florida Scenic Byways within the project limits or indicate N/A in text field. (Word limit 5).

Historic Preservation and Rehabilitation of Historic Transportation Facilities (Select this box for historic preservation or rehabilitation of historic transportation facilities). If "yes", list any locally designated or National Register of Historic Places listed or eligible resources or indicate N/A in the text field. (Word limit 5).

Vegetation Management (Select this box for vegetation management in public transportation ROW to improve roadway safety, prevent invasive species, and erosion control). If "yes", list any Florida Scenic Byways within the project limits, or indicate N/A in text field. (Word limit 5).

Archaeological Activities (Select this box for archaeological activities related to impacts from transportation projects funded by FHWA). If "yes", list the State Site Number (aka Site File Number) for the archaeological site, or indicate N/A in the text field. (Word limit 5).

Stormwater Mitigation (Select this box for environmental mitigation activities addressing stormwater management, control, and water pollution prevention or abatement related to transportation projects).

Wildlife Management (Select this box for wildlife mitigation and reduction of wildlife mortality, or to restore and maintain connectivity among terrestrial or aquatic habitats).

Boulevards (Select this box for boulevards, defined as a walkable, low speed (35 mph or less) divided arterial thoroughfares in urban environments designed to carry both through and local traffic, pedestrians, and bicyclists. These may be high ridership transit corridors; serve as primary goods movement and emergency response routes; and use vehicular and pedestrian access management techniques that promote economic revitalization and follow complete street principles]. If "yes", list any Florida Main Street communities or Florida Trail Towns within the project limits, or indicate N/A in text field. (Word limit 5).

Recreational Trails Program [Select this box for recreational trails compliant with 62-S-2, Florida Administrative Code, and 23 U.S.C. 104 (b)]. If "yes", list the parks / recreational areas within the project limits, or indicate N/A in the text field. (Word limit 5).

Safe Routes to Schools (SRTS) [Select this box for SRTS projects, codified as 23 U.S.C. 208, that substantially improves the ability of kindergarten through 12th grade students (vulnerable road users) to walk and / or bicycle to school]. Traditionally includes sidewalks, traffic calming and speed reduction, traffic diversion improvements, pedestrian and bicycle crossings, on-street bicycle facilities, off-street bicycle facilities, and bicycle parking facilities at public schools. If "yes", list the benefiting schools that are within two miles of the project limits; total student enrollment; approximate number of students living along the route; and the percentage of students eligible for reduced meal programs, or indicate N/A in the space provided. (Word limit 10).

Other surface transportation eligible purpose (Only if within urbanized areas with a population greater than 200,000). If "yes", list the eligible activity or indicate N/A in the space provided. (Word limit 5).

5-B. NI ELIGIBLE ACTIVITY *** Note: For Infrastructure projects, skip this page.***

Select one box that represents the project proposal. Checkbox indicating NI eligible activity. Document allows one selection.

- ● **Vulnerable road user safety assessment as defined by Section 316.027 (b), F.S.**

- **Workforce development, training and education activities that are eligible uses of TAP funds.**

- **SRTS projects, codified as 23 U.S.C. 208.** This NI activity must be primarily based at the school and benefit students and / or their parents and have documented support from the school(s). If "yes", list the benefiting schools; total student enrollment and students served by project; approximate number of students living along the route; and the percentage of students eligible for reduced meal programs, or indicate N/A in space provided. (Word limit 10).

NI COMPONENTS As applicable, insert the number of each type of proposed activity. Numerical field indicating total number NI program would provide.

- Number of walk or bicycle audits.
- Number of bicycle skills / safety classes.
- Number of pedestrian skills / safety classes.
- Number of community demonstration projects.
- Number of community encouragement activities.
- Number of community challenges.
- Number of community workshops / stakeholder meetings.
- Number of classroom / educational classes receiving pedestrian / bicycle safety instruction / education.
- Number of school assemblies receiving pedestrian / bicycle safety instruction / education.
- Number of training sessions to implement the SRTS program (e.g., training for volunteer walking school bus leaders, training for bicycle train leaders, etc.).
- Number of after school programs receiving pedestrian / bicycle safety instruction / education.
- Number of bicycle rodeos.
- Number of pedestrian safety skills events.
- Number of schools with walking school bus programs (defined as planned route with meeting points, a timetable, and a schedule of trained volunteers).
- Number of schools with bicycle train programs (defined as a planned route with meeting points, a timetable, and a schedule of trained volunteers).
- Number of student-led leadership initiatives (e.g., student patrols, peer-led learning, etc.).

PART 6 – AREA CONDITIONS

Select applicable boxes describing the area and complete applicable text fields. Then, upload supporting documentation.

1. **Select one box that describes the geographic population size of the project area.**
   - ○ Non-Urban Area with a population of 5,000 or less
   - ● Urban Area with a population greater than 5,000 but no more than 50,000
   - ○ Urban Area with a population greater than 50,000 but no more than 200,000
   - ○ Urban Area with a population greater than 200,000

2. **Is the project within the boundary of an MPO*?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the MPO in the space provided. (Word limit 5).

   ● Yes ○ No Miami Dade County

3. **Is the project within the boundary of a Transportation Management Area (TMA)?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the TMA in the space provided. (Word limit 5).

   ● Yes ○ No Miami Dade County

4. **Is the project within a Rural Economic Development Initiative (REDI) community or designated as a Rural Area of Opportunity (RAO) as defined pursuant to Section 288.0656, F.S.?** If not, select "no", and indicate N/A in the space provided. If so, select "yes" and indicate the REDI / RAO in the space provided. (Word limit 5)

   ○ Yes ● No

5. **Indicate the United States Congressional District number(s) of the project location.** (Word limit 5).

   34

6. **Will the project address equity by providing benefits to traditionally underserved communities as determined by the U.S. Census?** These communities could include low-income residents, minorities, those with limited English proficiency, persons with disabilities, children, or older adults. If not, select "no", and indicate N/A in the space provided. If so, select "yes", and briefly explain how the project improves environmental justice (e.g., disadvantage community access point(s) and destinations the project benefits, median household income, free or reduced priced school meals and how SRTS projects benefit the students, etc.). (Word limit 10).

   ● Yes ○ No Investment in underserved, pollution-burdened communities that are most dependent on active transportation.

7. **Are there transit stops / shelters / support facilities within the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the identification number. (Word limit 5).

   ○ Yes ○ No Tri-Rail, MDC Transit Bus Routes

8. **Is the project within a high-crash pedestrian corridor (or an area with a history of crashes involving pedestrians)?**

   ● Yes ○ No

9. **Is the project within a high-crash bicycle corridor (or an area with a history of crashes involving bicyclists)?**

   ● Yes ○ No

10. **Would the project implement a bicycle or pedestrian action plan(s)?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and specify the name of the plan and date of adoption. (Word limit 5).

    ● Yes ○ No Opa-locka Master Plan and Miami-Dade TPO

Metropolitan / Transportation Planning Organization / Agency (MPO)

REQUIRED UPLOAD: AREA CONDITIONS SUPPORTING DOCUMENTATION (e.g., excerpt pages from adopted plans or studies, maps illustrating transit facilities and connectivity to the improvement, short statement of support with a signature of the school official and their contact information for SRTS projects, median household income by census tract for community benefiting, collision heat maps / crash data for area surrounding project limits, etc.).

PART 7 – PUBLIC INVOLVEMENT

Public involvement, engagement, and collaboration is a key component of the federal project development process and must be conducted in accordance with applicable rules and regulations in the event the project is selected for funding. Indicate which of the following are applicable (Select all that apply). Complete the text field or indicate N/A in the space provided. Then, upload supporting documentation.

1. **Does the greater community support the project, as demonstrated by recently adopted proclamations or resolutions expressing commitment and public engagement?** If "yes", explain the engagement and how the concept evolved based on public involvement. Indicate the resolution number, adoption date, and participating parties in the space provided. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No Adopted City of Opa-locka Downtown Master Plan

2. **Was the project discussed at a regularly scheduled meeting of an advisory board of an appointed group of citizens, such as bicycle pedestrian advisory groups or similar committee that provides support toward the project?** If "yes", provide meeting information, including the date and type of advisory board meeting, and the input received. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No

3. **Was there an advertised public meeting to discuss the project?** If "yes", provide a brief description, including the input received, how the concept evolved based on public involvement, date, and type of meeting. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No

4. **Do recent community surveys indicate both need and support for the project and stakeholders will continue to be engaged in the implementation of the project?** If "yes", briefly explain. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No MDC-TPO SMART STEP: Bycicle and Pedestrian Needs Study

REQUIRED UPLOAD: PUBLIC INVOLVEMENT SUPPORTING DOCUMENTATION (e.g., resolution, proclamation, regularly scheduled meeting agenda and minutes, public meeting advertisement, community survey, letters of support, etc.).

PART 8 – CONCURRENCY / CONSISTENCY

Is the project consistent with the applicable comprehensive plan(s), transportation plan(s), capital improvement plan(s), and / or the long-term management plan(s)? [Note: Board of County Commissioners functions as MPO in nonmetropolitan areas (Section 339.135(4)(c)1, F.S.)]. If not, select "no", and indicate N/A in the space provided. If so, select "yes", and use the text field to explain consistency, include MPO prioritization number. If a modification is required, indicate the meeting date for adoption. (Word limit 10).

● Yes ○ No MDC SMART STEP and Opa-locka Downtown Master Plan

REQUIRED UPLOAD: CONCURRENCY / CONSISTENCY SUPPORTING DOCUMENTATION (e.g., supporting resolution(s), excerpt from comprehensive plan(s), transportation plan(s), capital improvement plan(s), management plan(s), prioritization list, etc.).

PART 9 – ENVIRONMENTAL CONDITIONS

Select the boxes describing the Environmental Conditions. As applicable, complete the text field or indicate N/A in the space provided. Then, upload supporting documentation. Applicants for NI proposals may skip the Environmental Conditions section.

1. **Does the project involve lands identified by the Florida Wildlife Corridor Act of 2021 [Section 259.1055, Florida Statutes (F.S.)]?**

   ○ Yes ● No

2. **Does the project involve state-owned conservation lands?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the state-owned conservation lands. NOTE: Use of state-owned conservation lands is subject to coordination by the managing entity. (Word limit 5).

   ○ Yes ● No

3. **Does a railway facility exist within 1,000 feet of the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate railway facility. (Word limit 5).

   ● Yes ○ No TriRail (480 Ali Baba Avenue)

4. **Does the project physically cross a railway facility?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the crossing's railway identification number, and beginning and ending mile points. (Word limit 5).

   ● Yes ○ No Opa-locka Blvd. 528323J

5. **Would the project provide lighting at locations with nighttime crashes?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe the proposed lighting in the space provided. (Word limit 5).

   ● Yes ○ No

6. **Would the project implement an adopted Americans with Disabilities Act (ADA) transition plan?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe proposed ADA improvements in the space provided. (Word limit 5).

   ● Yes ○ No

7. **Is an Environmental Assessment for the project complete?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe any specific issues in the space provided. (Word limit 10).

   ○ Yes ● No N/A

8. **Is the project adjacent to locally designated or National Register of Historic Places (NRHP) listed or eligible resources?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list resources, indicate if the resources have received Florida Department of State Historic Preservation Grant funds, and explain any preservation agreements, covenants, or easements in the space provided. If applicable, select "unknown". (Word limit 5).

   ○ Yes ● No ○ Unknown

9. **Are there any archaeological sites or Native American sites located within or adjacent to the project boundary?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list State Site Number (aka Site File Number) for the sites. If applicable, select "unknown". (Word limit 5).

   ○ Yes ● No ○ Unknown

10. **Are there any parks, recreation areas, or wildlife / waterfowl refuges within or adjacent to the project boundary?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list the facilities in the space provided. (Word limit 5).

    ○ Yes ● No

11. **Are there any navigable waterways adjacent to or within the project boundary?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list the navigable waterways. (Word limit 5).

    ○ Yes ● No N/A

12. **Are there any wetlands within or adjacent to the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. Include permit types required and any obtained for the project. (Word limit 5).

    ○ Yes ● No N/A

13. **Is it likely that there are protected / endangered / threatened species and / or critical habitat impacts within the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. If applicable, select "unknown". (Word limit 5).

    ○ Yes ● No ○ Unknown N/A

14. **Are there any potential contamination / hazardous waste areas within or adjacent to the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. If applicable, select "unknown". (Word limit 5).

    ○ Yes ● No ○ Unknown N/A

15. **Are there any noise-sensitive areas near the project area?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. If applicable, select "unknown" (Word limit 5).

    ○ Yes ● No ○ Unknown N/A

REQUIRED UPLOAD for Infrastructure (not applicable for NI): ENVIRONMENTAL CONDITIONS SUPPORTING DOCUMENTATION (e.g., labeled photographs on maps depicting conditions, permits, copy of the entire study or environmental assessment, excerpt pages from adopted plans, etc.).

PART 10 – DESIGN / TYPICAL SECTIONS

Select the boxes describing the design status and complete the text fields. Then, upload supporting documentation. Applicants for NI proposals may skip the Design / Typical Section.

1. **Are signed and sealed design plans available for this project?**
   ○ Yes ● No

2. **If design plans are not at 100 percent, or do not meet current standards and / or reflect existing conditions, select the box identifying the status.** (Word limit 100).
   ● No design plans ○ 30% design plans ○ 60% design plans ○ 90% design plans
   ○ Other:

   As part of this program the City will issued an Invitation to Bid for qualified firms to provide architetural, engineering and design services. Conceptual Plans have been developed internally by CIty Staff.

3. **Briefly describe the design status in the space provided.** If design is at 100 percent, indicate the date of the plans. (Word limit 100).

   N/A

REQUIRED UPLOAD for Infrastructure (not applicable for NI): Typical Section(s) depicting existing and proposed features, dimensions, and ROW lines. If there are multiple segments, provide typical sections for each. If available, provide design plans.

PART 11 – OWNERSHIP / ROW STATUS

Select the boxes describing the Ownership / ROW Status and complete applicable text fields. Then, upload supporting documentation. Applicants for NI proposals may skip the Ownership / ROW Status section.

1. **Is ROW acquisition, defined as obtaining property not currently owned by the Local Agency through any means (e.g., deed, easement, dedication, donation, etc.), necessary to complete this project?**

   ● Yes ○ No

2. **Explain the ROW status (owned / fee simple, leased / less-than fee, and / or needs) along the project boundary, including when ROW was obtained and how ownership is documented (e.g., plats, deeds, prescriptions, certified surveys, transfers, easements). Provide information for verifying ownership (e.g., book / page number, transfer agreements, dates, etc.). If ROW acquisition is necessary before constructing the proposed project and / or the applicant agency is not the landowner, indicate the necessary coordination with other owners for all fee-simple purchases and / or any less-than fee / lease needs (including temporary construction and / or other easements and / or permits for drainage, railroad, utilities, etc.) necessary to secure ROW certification. Indicate the proposed acquisition timeline, expected funding source, the total number of parcels, type of acquisition, limitations on fund use or availability, and who will acquire and retain ownership of proposed land.** (Word limit 150).

The roads listed for this project are part of the City of Opa-locka Public Right of Way.
Sharazad Blvd. (Owner City of Opa-locka)
Opa-locka Blvd. (Owner City of Opa-locka)
Perviz Avenue (Owner City of Opa-locka)
Ali Baba Avenue (Owner City of Opa-locka)

REQUIRED UPLOAD for Infrastructure (not applicable for NI): OWNERSHIP / ROW STATUS SUPPORTING DOCUMENTATION including applicable ROW Certification including ownership verification documenting site control and related landowner supporting documentation. Site control documents must include an adequate legal description of the parcel(s) comprising the project site, such that staff can compare it to the boundary map submitted with the application and evaluate whether there is control of the project site (e.g., ROW Certification, ROW maps, plats, warranty deeds, prescriptions, certified surveys, easements, use agreement, etc.). Maps should clearly show the location of each ownership in relation to the project boundary and / or limits. NOTE: provide map documentation on 8.5" x 11" scale. DO NOT provide reduced copies of original plats and or maps that cannot be read at scale. If applicable, an exhibit visually depicting the new ROW anticipated for the project, together with a spreadsheet providing the tax identification number(s) of each impacted parcel and the approximate size of the new acquisition area for each impacted parcel.

PART 12 – PROJECT IMPLEMENTATION AND COSTS

Complete either the Infrastructure Table Summary with the overall project programming (phases, schedule, and estimated costs for the proposed work) or the NI Cost Narrative Table. Then, upload supporting documentation.

Not all phase types may be eligible for TA funds, and not all areas prioritize all phases. Local agencies are responsible for covering all unanticipated cost increases, including but not limited to price inflation and increases in the cost of construction; account for them using local funds. FDOT does not allow programming TA funds for contingency costs. The local agency must have the ability to pay for non-participating costs (e.g., utility relocation). Chapter 337.14, F.S. prohibits an entity from performing both design services and construction engineering inspection services (CEI) for a project wholly or partially funded by the FDOT and administered by a local government entity.

REQUIRED UPLOAD: PROJECT IMPLEMENTATION AND COSTS SUPPORTING DOCUMENTATION.
1) Either provide a detailed engineer cost estimate if the project is designed or if the project has not been designed or is a NI project, provide a detailed opinion of probable costs (including all pay items and a timeline for deliverable). Utilize the FDOT Basis of Estimates Manual to develop a detailed estimate with FDOT pay items for construction phase estimates.
2) As applicable, letter from local agency budget office committing local funds to the project.

***** Note: Applications for NI Projects to skip to page 15.*****

Infrastructure Project Phases / Work Types	Select phase(s) included in this request	INFRASTRUCTURE Table Summary Overall Project Programming (Cost Summary and Schedule)						
		Schedule (Month/Year)		Funding sources and costs ($)				
				Federal Funds		Non-Federal / Local Funds		Total Cost Estimate ($)
		Start (mm/yy)	End (mm/yy)	TA Program ($)	Other Federal ($)	Non-TA/ Local Funds ($)	Other ($)	
Planning Development (Corridor or Feasibility)								
PD&E								
Preliminary Engineering / Design (PE)	✓			60000		90000		150000
Environmental Assessment (associated with PE)	✓			15500		0		15500
Permits (associated with PE)				30000		32500		62500
ROW	✓			0		0		0
Construction				869500		127500		997000
CEI	✓			25000				25000
Other costs (describe)								
							Total Infrastructure Project Cost Estimate	

***** Note: applications for infrastructure projects do not need to fill out this page*****

NI Cost Narrative Table

Below each item, explain how the item will support the program, and other appropriate details.

Budget Item	Requested Funds
Personnel Services (List titles and totals in first boxes below) In Narrative, include numbers of hours, hourly rates, who this person is, and whether it's a new position or new hours and duties added to an existing position.	
Narrative:	
Narrative:	
Narrative:	
Expenses	
Materials and Supplies:	
Educational items:	
Promotional Items:	
Other Expenses:	
Operating Capital Outlay	
Equipment:	
Total NI Project Cost Estimate	

RESOURCES

FDOT Transportation Alternatives Program:
https://www.fdot.gov/planning/systems/systems-management/tap

FDOT Local Agency Program Manual:
http://www.fdot.gov/programmanagement/LP/Default.shtm

FDOT Office of Environmental Management PD&E Manual:
https://www.fdot.gov/environment/pubs/pdeman/pdeman-current

FDOT Basis of Estimates Manual:
https://www.fdot.gov/programmanagement/estimates/documents/basisofestimatesmanual/boemanual

Florida Safe Routes to School Guidelines:
https://www.fdot.gov/safety/2A-Programs/Safe-Routes.shtm

TRANSPORTATION ALTERNATIVES PROGRAM CERTIFICATION OF PROJECT SPONSOR

PROJECT NAME: City of Opa-locka Non-Motorized Improvements (Bicyclist and Pedestrian Infrastructure Improvements)

LOCATION: City of Opa-locka

PROJECT LIMITS: (from south or west limit)

(to north or east limit)

By checking the box you agree to do the following:

- ✓ Enter into a maintenance agreement with the Florida Department of Transportation (FDOT), as necessary, prior to the design phase.
- ✓ Comply with the **Federal Uniform Relocation Assistance and Acquisition Policies Act** for any Right of Way actions required for the project.
- ✓ Provide any required funding match, incur any additional expenses beyond the approved project costs in the LAP agreement, and are responsible for any non-participating items (e.g. utility relocations).
- ✓ Pursue or retain LAP certification and enter into a LAP agreement with FDOT.
- ✓ Comply with NEPA process prior to construction, including any necessary involvement with the State Historic Preservation Officer (SHPO), and other State and/or Federal agencies, prior to construction.

I further certify that the estimated costs included herein are reasonable and agree to follow through on the project once programmed in the FDOT's Work Program. I fully understand that significant increases in these costs could cause the project to be removed from the FDOT's Work Program.

* Signature

Darvin Williams

Name (please type or print)

City of Opa-locka Interim City Manager

Title

11/27/2023

Date

* This should be executed by person who has signatory authority for sponsor and is authorized to obligate services and funds for that entity (generally chairman of the board or council).

Sponsored By: Interim City Manager

RESOLUTION NO. 24-

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, ACCEPTING THE PROPOSAL OF CHEN MOORE AND ASSOCIATES, INC. FOR CITYWIDE URBAN FOREST PLAN SERVICES, PURSUANT TO RFP NO. 23-1128200 AND FURTHER AUTHORIZING THE EXECUTION OF AN AGREEMENT WITH CHEN MOORE AND ASSOCIATES, INC. FOR SAID SERVICES, IN AN AMOUNT NOT TO EXCEED EIGHTY SEVEN THOUSAND, SIX HUNDRED SIXTY DOLLARS ($87,660.00) AND IN THE FORM ATTACHED HERETO AS EXHIBIT "A"; PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City is seeking to update the City's existing street tree plan and to also expand the scope of services to include park trees, trees in easement areas, trees near power lines that are maintained by the City of Opa-locka and Florida Power and Light, and trees on private and other non-City of Opa-Locka property. The City of Opa-locka' s street tree plan will become the Urban Forest Plan; and

WHEREAS, the City's Urban Forest Plan is intended to be strategic in advancing social equity and contributing to an improved quality of life for residents by providing the benefits of an urban tree canopy; and

WHEREAS, on October 25, 2023, the City of Opa-locka ("City") released Request for Proposals (RFP) No. 23-1128200 to obtain Urban Forest Plan Services for the City; and

WHEREAS, on November 28, 2023, five (5) sealed proposal were received by the City Clerk's Office; and

WHEREAS, the Evaluation Committee reviewed the proposals and subsequently selected Chen Moore and Associates, Inc. as the most responsive responsible bidder; and

WHEREAS, Chen Moore and Associates, Inc. has proposed Eighty-Seven Thousand, Six Hundred Sixty Dollars ($87,660.00) for the project; and

WHEREAS, the City Commission finds that acceptance of Chen Moore and Associates, Inc. proposal for Citywide Urban Forest Plan Services and entering into an agreement with said company is in the best interest of the City of Opa-locka and its residents.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

SECTION 2. The City Commission of the City of Opa-locka, Florida hereby accepts the proposal of Chen Moore and Associates, Inc. relating to Request for Proposals (RFP) 23-1128200, for Citywide Urban Forest Plan Services, and authorizes the execution of the Interim City Manager to enter into an agreement for same, attached hereto as Exhibit "A", in an amount not to exceed Eighty-Seven Thousand, Six Hundred Sixty Dollars (87,660.00).

SECTION 3. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

SECTION 4. This Resolution shall take effect upon adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Resolution No. _____

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

City of Opa-locka
Agenda Cover Memo

Department Director:	Adelina Gross			**Department Director Signature:**				
City Manager:	Darvin Williams			**CM Signature:**				
Commission Meeting Date:	*01.11.2023*		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		**X**
Funding Source: *Account#* **:**	*(Enter Fund & Dept)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X							
Sponsor Name	City Manager		**Department:**		City Manager			

Short Title:

A resolution authorizing the Interim City Manager to accept the proposal of Chen Moore and Associates for Citywide Urban Forest Plan pursuant to RFP No. 23-1128200 and further authorizing the Interim City Manager to enter into an agreement with Chen Moore and Associates for said services.

Staff Summary:

The City is seeking to both update the City's existing street tree plan and expand the scope to include park trees, trees in easement areas, trees near power lines that are maintained by the City of Opa-locka and Florida Power and Light, and trees on private and other non-City of Opa-locka property. Thus, Opa-locka's street tree plan will become the Urban Forest Plan.

The City's Urban Forest Plan is intended to be strategic in advancing social equity and contributing to an improved quality of life by providing the benefits of urban tree canopy to all community members, which includes improvement of overall emotional and psychological health, and improvement of physical health.

The City Clerk received and certified five (5) proposal documents on November 28, 2023.

For over two decades, CMA staff have provided expertise in arboriculture, urban forestry, landscape design, and planning services to serve the needs of municipalities and other client types throughout Florida. They provided master plans and management plans for urban forest resources for a variety of projects throughout southeast Florida, including City-wide urban forest resources, City-wide Park systems, individual parks, and urban corridors.

Financial Impact:

Account	Description	Available	Project	Remaining Balance
44-541856	Comprehensive Urban Forest Plan	100,000.00	$ 87,660	$12,340

Proposed Action:

Staff recommends the City Commission approve the recommendation for Chen Moore and Associates and authorize the Interim City Manager to enter into an agreement with said company.

Attachment:

RFP No. 23-1128200
Bid Certification
Bid Proposal

CITY OF OPA-LOCKA

REQUEST FOR PROPOSAL
RFP NO. 23-1128200

CITYWIDE URBAN FOREST PLAN

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   f. NON-DISCRIMINATION AFFIDAVIT
   g. E-VERIFY FORM

RFP NO: 23-1128200
CITYWIDE URBAN FOREST PLAN

The sealed proposal for Citywide Urban Forest Plan for the City of Opa-locka will be received by the City's Clerk Office, 780 Fisherman St, 4th Floor, Opa-locka, Florida 33054, **Tuesday, November 28, 2023**, by 2:00 pm. Any RFP Package received after the designated closing time will be returned unopened. The City will accept proposals by mail; however, the contractor must submit the proposal by the due date. In addition, the proposal may be submitted via www.demandstar.com (e-bid) by 2:00 pm.

The address to submit sealed proposal is listed below:

CITY OF OPA-LOCKA
Office of the City Clerk
780 Fisherman Street, 4th Floor
Opa-locka, Florida 33054

An original and six (6) copies for a total of seven (7) plus 1 copy of the Proposal package on USB Flash Drive in PDF format shall be submitted in sealed envelopes/packages addressed to the City Clerk, City of Opa-locka, Florida, and marked RFP for CITYWIDE URBAN FOREST PLAN.

Proposers desiring information for use in preparing proposals may obtain a set of such documents by visiting the City's website at www.opalockafl.gov or www.demandstar.com.

The City reserves the right to accept or reject any and all proposals and to waive any technicalities or irregularities therein. The City further reserves the right to award the contract to that proposer whose proposal best complies with the RFP NO: 23-1128200 requirements. Proposers may not withdraw their proposal for a period of ninety (90) days from the date set for the opening thereof.

Joanna Flores, CMC
City Clerk

RFP NO: 23-1128200
PART I
PROPOSAL GUIDELINES

1-1. Introduction: The City of Opa-locka seeks proposals for a CITYWIDE URBAN FOREST PLAN. The City is soliciting bids on behalf of the City Manager's Office for the Citywide Forest Plan Services under the laws of the State of Florida. These services must be efficient and economical, adhere to industry standards and best practices, and utilize the latest nonproprietary technology. The Contract will be awarded to the highest ranked Proposer, as described in the Evaluation Procedures Section below.

1-2. Proposal Submission and Withdrawal: The City of Opa-locka will be accepting proposals by mail, however it is Proposer's responsibility to submit Proposer's proposal by the due date. In addition, proposals may be submitted via www.demandstar.com (e-bid). The City must receive all proposals by 2:00 p.m. on Tuesday, November 28, 2023. The address to submit sealed proposals is listed below:

CITY OF OPA-LOCKA
Office of the City Clerk
780 Fisherman Street,4th Floor
Opa-locka, Florida 33054

To facilitate processing, please clearly mark the outside of the proposal package as follows: **RFP NO. 23-1128200 – CITYWIDE URBAN FOREST PLAN**.

This package shall also include the Proposer's return address. Proposers may withdraw their proposals by notifying the City in writing at any time prior to the deadline for proposal submittal. After the deadline, the proposal will constitute an irrevocable offer, for a period of 90 days. Once opened, proposals become a record of the City and will not be returned to the Proposer.

The City cautions Proposers to assure actual delivery of mailed or hand-delivered proposals directly to the City Clerk's Office at 780 Fisherman Street, 4th Floor, Opa-locka, Florida 33054 prior to the deadline set for receiving proposals. Telephone confirmation of timely receipt of the proposal may be made by calling (305) 688-4611 before proposal closing time. Any proposal received after the established deadline will not be considered and will be returned unopened to the Proposer(s).

1-3. Number of Copies: Proposers shall submit an original and six (6) copies (a total of 7) plus one copy on USB flash drive in PDF format of the proposal in a sealed, opaque package marked as noted above. The Proposer will be responsible for timely delivery, whether by personal delivery, US Mail or any other delivery medium.

1-4. Development Costs: Neither the City nor its representatives shall be liable for any expenses incurred in connection with the preparation of a response to this Request for Proposal. Proposers should prepare their proposals simply and economically, providing a straightforward and concise description of the Proposer's ability to meet the requirements of the RFP.

1-5. Inquiries: The City Clerk will receive written requests for clarification concerning the meaning or interpretations of the RFP, until eight (8) days prior to the submittal date. City personnel are authorized only to direct the attention of prospective Proposers to various portions of the RFP so that they may read and interpret such for themselves. No employee of the City is authorized to interpret any portion of this RFP or give information as to the requirements of the RFP in addition to what is contained in the written RFP document.

1-6. Addendum: The City may record its response to inquiries and any supplemental instructions in the form of written addenda. The City may mail written addenda up to three (3) calendar days before the date fixed for receiving the proposals. Proposers shall contact the City to ascertain whether any addenda have been issued. Failure to do so could result in an unresponsive proposal. Any oral explanation given before the RFP opening will not be binding.

All Proposers are expected to carefully examine the proposal documents. Any ambiguities or inconsistencies should be brought to the attention of the City's Purchasing Agent through written communication prior to the opening of the proposals.

1-7. Contract Awards: The City anticipates entering into an Agreement with the Proposer who submits the proposal judged by the City to be most advantageous.

The Proposer understands that this RFP does not constitute an offer or an Agreement with the Proposer. An offer or Agreement shall not be deemed to exist and is not binding until proposals are reviewed, accepted by appointed staff, the best proposal has been identified, approved by the appropriate level of authority within the City and executed by all parties. The City anticipates that the final Agreement will be in substantial conformance with this sample Agreement; nevertheless, Proposers are advised that any Agreement may result from the RFP may deviate from the Sample Agreement.

The City reserves the right to reject all proposals, to abandon the project and/or to solicit and re- advertise for other proposals.

1-8. Contractual Agreement: This RFP and Consultant/Contractor proposal shall be included and incorporated in the final award. The order of contractual precedence will be the Contract or Agreement document, original Terms and Conditions, and Proposer response. Any and all legal action necessary to enforce the award will be held in Miami-Dade County and the contractual obligations will be interpreted according to the laws of Florida. Any additional contract or agreement requested for consideration by the Proposer must be attached and enclosed as part of the proposal.

1-9. Selection Process: The proposals will be evaluated and assigned points. The firm with the highest number of points will be ranked first; however, nothing herein will prevent the City from assigning work to any firm deemed responsive and responsible.

The City reserves the right to further negotiate any proposal, including price, with the highest rated Proposer. If an agreement cannot be reached with the highest rated Proposer, the City reserves the right to negotiate and recommend award to the next highest Proposer or subsequent Proposers until an agreement is reached.

1-10. Public Records: Upon award recommendation or ten (10) days after opening, whichever occurs first, proposals become "public records" and shall be subject to public disclosure consistent with Chapter 119 Florida Statutes. Proposers must invoke the exemptions to disclosure provided by law in the response to the RFP and must identify the data or other materials to be protected and must state the reasons why such exclusion from public disclosure is necessary. Document files may be examined during normal working hours.

1-11. News Releases: The Proposer shall obtain the prior approval of the City Manager's Office for all news releases or other publicity pertaining to this RFP or the service, study, or project to which it relates.

1-12. Insurance: The awarded Proposer(s) shall maintain insurance coverage reflecting at least the minimum amounts and conditions specified herein. In the event the Proposer is a governmental entity or a self-insured organization, different insurance requirements may apply. Misrepresentation of any material fact, whether intentional or not, regarding the Proposers' insurance coverage, policies or capabilities may be grounds for rejection of the proposal and rescission of any ensuing Agreement.

- Evidence of General Liability coverage with limits not less than $1,000,000 per Occurrence/ $2,000,000 Aggregate (Including Policy Number and Policy Period);
- Evidence of Auto Liability coverage with limits not less than $1,000,000 per Occurrence/$1,000,000 Aggregate (Including Policy Number and Policy Period);
- Evidence of Workers' Compensation coverage with statutory limits and Employer's Liability coverage with limits not less than $100,000 (Including Policy Number and Policy Period);
- The City listed as an additional insured (this may be specifically limited to the specific job(s) the contractor will be performing);
- Minimum 30-day written notice of cancellation.

1-13. Licenses: Proposers, both corporate and individual, must be fully licensed and certified in the State of Florida at the time of RFP submittal. The proposal of any Proposer who is not fully licensed and certified shall be rejected.

1-14. Public Entity Crimes: Award will not be made to any person or affiliate identified on the Department of Management Services' "Convicted Vendor List". This list is defined as consisting

of persons and affiliates who are disqualified from public contracting and purchasing processes because they have been found guilty of a public entity crime. No public entity shall award any contract to or transact any business in excess of the threshold amount provided in Section 287.017 Florida Statutes for Category Two (currently $25,000) with any person or affiliated on the "Convicted Vendor List" for a period of thirty-six (36) months from the date that person or affiliate was placed on the "Convicted Vendor List" unless that person or affiliate has been removed from the list. By signing and submitting the RFP proposal forms, Proposer attests that they have not been placed on the "Convicted Vendor List".

1-15. Code Of Ethics: If any Proposer violates or is a party to a violation of the code of ethics of the City of Opa-locka or the State of Florida with respect to this proposal, such Proposer may be disqualified from performing the work described in this proposal or from furnishing the goods or services for which the proposal is submitted and shall be further disqualified from submitting any future proposals for work, goods or services for the City of Opa-locka.

1-16. Drug-Free Workplace: Preference shall be given to businesses with Drug-Free Workplace (DFW) programs. Whenever two or more proposals which are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a proposal received from a business that completes the attached DFW form certifying that it is a DFW shall be given preference in the award process.

1-17. Permits and Taxes: The Proposer shall procure all permits, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

1-18. Protests: Protests of the plans, specifications, and other requirements of the request for proposal and bids must be received in writing by the City Clerk's Office at least ten (10) working days prior to the scheduled bid opening. A detailed explanation of the reason for the protest must be included. Protests of the award or intended award of the bid or contract must be in writing and received in the City Clerk's Office within seven (7) working days of the notice of award. A detailed explanation of the protest must be included.

1-19. Termination for Convenience: A contract may be terminated in whole or in part by the City at any time and for any reason in accordance with this clause whenever the City shall determine that such termination is in the best interest of the City. Any such termination shall be affected by the delivery to the contractor at least five (5) working days before the effective date of a Notice of Termination specifying the extent to which performance shall be terminated and the date upon which termination becomes effective. An equitable adjustment in the contract price shall be made for the completed service, but no amount shall be allowed for anticipated profit on unperformed service.

CALENDAR EVENTS

EVENT	DATE/LOCATION	
Release Date	10/29/23	
Pre-Bid Meeting	TBA	
Written Questions Due	11/09/23 @ 5:00pm Email questions to jbergel@opalockafl.gov With Subject line "RFQ No: Bid Questions"	
Response to Questions	11/14/23 @ 5:00pm	
Due Date/Bid Opening	11/28/23 @ 2:00 pm	at: City of Opa-locka Clerk Office 780 Fisherman Street, 4th Floor Opa-locka, Florida 33054 OR Electronic Bid on www.Demandstar.com
EVALUATION: Evaluation Committee Meeting (Open to the Public).	TBA	
Award Letter Recommendation	TBA	
Post Award	TBA	

PART II
NATURE OF SERVICE

I. INTRODUCTION

The City of Opa-locka (City) seeks proposals from qualified firms, consultants, or consultant teams to perform professional consulting and planning services to prepare a comprehensive citywide Urban Forest Plan in accordance with this Request for Proposals (RFP). The proposal seeks to both update the City's existing street tree plan and expand the scope to include park trees, trees in easement areas, trees near power lines that are maintained by the City of Opa-locka and Florida Power and Light, and trees on private and other non-City of Opa-locka property. Thus, Opa-locka's street tree plan will become the Urban Forest Plan.

The City's Urban Forest Plan is intended to be strategic in advancing social equity and contributing to an improved quality of life by providing the benefits of urban tree canopy to all community members, which includes improvement of overall emotional and psychological health, and improvement of physical health. USDA Forest Service maps of urban tree canopy coverage show that most of the City has between 0-12% tree canopy coverage. A focus of the Urban Forest Plan should be expanding the urban forest and creating a more equal distribution of trees across all the City of Opa-locka's neighborhoods. The assessment must include a social vulnerability assessment that is intended to guide the equitable implementation of Urban Forestry strategies, including its expansion.

A. PURPOSE OF REQUEST

The purpose of this Request for Proposals is to develop an Urban Forest Plan that accomplishes the following:

1. Creation of a Master Street Tree Plan. The proposal seeks to create a street tree plan expand the scope to include park trees and develop recommendations to promote an increase in the overall canopy, including trees not managed by the city.
2. Develop a Dynamic and Forward-focused Plan and Related Policies Based on the Needs of the City. The City is in need of a Tree Canopy Assessment and strategies for planting, maintenance, and pruning trees to meet the needs of the Community. Additionally, new revision/addition and/or creation of City Ordinances, and the creation of planning documents integrating Urban Forest activities and initiatives. The Urban Forest Plan will guide the City's operations and activities, including expanding and maintaining the tree canopy, for the next 10 years.
3. Review the Structure and Funding of Urban Forest Management. The City is currently looking to employ one full-time arborist within the Beautification Department. The Plan will propose future staffing and contract levels, effective organizational structures, and recommend funding mechanisms for a proactive Urban Forest Program that will provide a level of service necessary for a sustainable and thriving urban forest.

B. GUIDING PRINCIPLES

The City seeks to build upon the existing trees and expand its healthy and resilient tree canopy. Equity must be centered throughout all phases of the development of the Urban Forest Plan, including incorporation of racial equity, soliciting community engagement and input, and assessments of tree canopy alongside social vulnerability. The goal is to expand the urban forest and make the benefits of an urban tree canopy accessible to all neighborhoods, especially those with residents that are lower-income and communities of color. The Urban Forest Plan should be ambitious and achievable with the recommended program budget and staffing recommendations.

Incorporation of Equity and Indigenous Practices

The existing Community makeup and tree coverage is a result of historic development practices and exclusionary policies. With the disproportionate impacts on property value, wealth, and public health, it is essential that the Urban Forest Plan establish racial equity guardrails such that policies and practices moving forward do not continue to exacerbate existing gaps between the community. Proposals should describe how the Consultant Team plans to incorporate a Social Vulnerability Analysis into its recommended strategies and prioritize the benefits of tree shade to those communities that currently lack tree canopy, including increasing access to decision-making in the planning process. The diversity of languages and cultural backgrounds of residents should be incorporated into the outreach strategy and plan.

Focus on Drought Tolerant and Native Species

The Urban Forest Plan should identify trees well suited to Opa-locka's current and future climate. A focus on drought-tolerant, shade-producing, Florida native species suited to Opa-locka's changing climate is preferred. Trees with high carbon sequestration capacity are also preferred.

Integration with City plans

The Urban Forest Plan should complement and build upon existing City plans, including the Community Development, Community Redevelopment Association and Opa-locka 2030 Plan, particularly in holistically addressing green space and climate impacts across Opa-locka and include recommendations for complying with related State mandates and requirements, not limited to Water Efficient Landscape and Miami-Dade County and State of Florida regulations.

I. SCOPE OF SERVICES

The City is looking to move forward quickly upon contract execution with the selected Consultant to meet the targeted project milestones. The selected Consultant is expected to provide the deliverables and to facilitate or participate in all tasks that list the Consultant as the responsible party. Each task should be costed separately for the project team to decide what can be achieved with the budget. If it makes sense to combine tasks, they can be combined if the objectives are still met. Proposers may include additional, optional tasks that they feel should be included in the project to achieve the optimal outcome; however, these costs and hours must be listed separately in the budget and may not be approved.

Please note that **this project has a not to exceed budget of $100,000.00 including but not limited to additional services and tasks the Consultant may propose as optional tasks.**

Notwithstanding the inclusion of services in this RFP, the final scope of services negotiated between the City and the successful Proposer shall be set forth in the Professional Services Agreement ("Agreement") executed by and between the City and the successful Proposer.

1. Project Management

A. Coordination and Meetings. The selected Consultant's Project Manager will take the lead in coordinating all project activities, including coordinating with City of Opa-locka Project Manager, deliverables, submissions, permits, and similar coordination efforts consistent with the scope of services.

1. The Consultant shall develop a plan for regular meetings with City staff throughout the duration of the project as required to coordinate and execute the scope of services. The Consultant shall prepare and circulate meeting minutes from all coordinating meetings.
2. The Consultant shall develop a plan and schedule to conduct and present at public outreach meetings (using various forms of virtual platforms) to solicit input from, promote the project to, and garner support for the project by the public.
3. The Consultant shall present draft and final plan documents at relevant City Board and Commission and City Council meetings and support the Plan's adoption by City Council.

B. Project Schedule. The Consultant shall prepare and periodically update a project schedule with tasks and milestones. The Consultant shall break down the schedule by logical tasks with enough detail to track project progress. The schedule must reflect realistic review periods for tasks, such as reports, plans, and coordination.

C. Administration

1. The Consultant shall submit a consolidated monthly invoice that includes a
2. progress report reflecting the work completed with the invoice.
3. The Consultant shall maintain project files in accordance with its Work Plan.

D. Work Plan. The Consultant shall prepare a Work Plan, based on the agreed upon Scope of Work, that includes a list of deliverables, milestone submittal schedule, summary of organization responsibilities and contacts, and task budgets. The Work Plan shall be submitted to the City and approved prior to the first invoice.

2. Analysis of Current Status, Challenges and Opportunities

As part of the development of the Urban Forest Plan, the consultant will review all relevant material, including City policies and documents, to identify where the City is successfully meeting program goals, and where there are gaps and areas for recommended improvements.

A. Assess City Policies and Documents. The Consultant shall review and assess all relevant material listed in this section.

1. Community Development Master Plan

2. Municipal Code (e.g., Protection of Trees, Trees and Shrubbery, Landscaping, Preservation of Historical and Cultural Resources).

3. City Guidelines, Specifications and Standards (e.g., Street Design, Planning Permits, Greenstreet Guidelines, Neighborhood Design Guidelines, Tree Removal/Pruning Permits, Landmark Trees, Master Tree List, Parking Lot Shade Guidelines, Street Tree Planting Requirements, City Landscape and Tree Maintenance Specifications)

4. Climate Action and Resiliency Plan

5. Contractor technical specifications for public tree maintenance.

6. Maintenance and level of service for trees in city easements

7. Key Parties and Stakeholders (interviews required)

    a) City Council and Advisory Commissions

    b) City Staff and Other Public Agencies

    c) Non-Profit Groups

    d) Residents and Business Owners

    e) Others

8. Summarize current and future challenges and opportunities in terms of City policies and planning. Who manages/ interacts with trees in City of Opa-locka? What conflicts exist between public agencies/departments/residents with respect to tree management? What opportunities exist for improving city policies, procedures, and plans related to public and private trees?

B. Assess Program Structure, Function, and Budget

1. Current staffing and program resources/staffing/roles and responsibilities (e.g., in-house, tree maintenance contract)

2. Work conducted (i.e., planting, young tree care, mature tree care, hazard tree abatement, administration, special projects (e.g., removal/replacement programs, major corridor tree/landscape improvements), backlog of work, emergency response, levels of interdepartmental coordination, etc.

3. Budget allocated and current level of service.

C. Assess Current City Public Tree Resources (Streets, Easements, Open Space, and Parks)

1. Tree numbers and stocking levels (from existing inventory)

2. Species composition and age diversity (from existing inventory)

3. Species fitness for future climate and growing conditions (pests, drought, etc.)

4. Management needs

5. Current value – resource units and annual monetary benefits, benefit-cost ratios for street and park tree populations

6. Current public opinion – conduct outreach to determine public opinion concerning services provided by the City and preference for alternative future investments.

D. Assess Private and Public Trees Resources (Canopy Cover Analysis)

1. Tree canopy cover and available growing space (area and %) by census tract (for equity assessment)

2. Overall health of the canopy by census tract (if discernible from existing imagery).

3. Identify primary threats to urban forest health citywide.

4. Equity assessment (distribution of canopy cover and its health, as well as available growing space, in relation to socio-economic indicators of need from census tract data.

5. Planting and management needs to be prioritized by census tract.

6. Value-resource units and annual monetary benefits, benefit-cost ratios by census tract if available

7. Current public opinion – conduct outreach to determine public opinion concerning the extent, health and preference for alternative future investments in the City's urban forest canopy.

8. Provide an overall assessment of Opa-locka's existing urban forest ecology using a framework such as Nature Serve's Ecology Integrity Assessment Method, US Forest Service's Forest Landscape Assessment Tool or other appropriate framework.

3. Stakeholder Participation and Outreach

A. Develop and implement an outreach plan that identifies and engages stakeholders. Consultant team should expect to have a multilingual outreach process that supports engagement with a diversity of cultures and ethnic backgrounds.

B. Develop and provide content for project web pages to be uploaded by City staff and hosted on the existing City web site, which will be a resource for projectdocuments.

C. Collect input from stakeholders, including communities that may not be able to participate in web-

public comment, pop-up events at farmers markets and other spaces, community presentations, or student ambassadors.

D. Develop media messaging materials and a media outreach strategy to inform the public about the planning process as well as opportunities for residents to be involved in supporting the health of the urban forest, including planting and properly managing trees on private and public property.

E. Engagement is expected to be ongoing, substantial, and center neighborhoods where priority tree planting will likely occur.

F. The Project Manager can assist in connecting to local partners and community groups, as well as running some of the outreach events/pop-ups.

4. Urban Forest Plan Development

The consultant team will prepare the Urban Forest Plan document with input from City staff to encompass the determinations based on issues identified in the Scope of Work. The consultant team will develop the organization, narrative text, graphic layout, and a complementary web-based document. The Plan will retain and expand to include park trees and develop recommendations to promote an increase in the overall canopy, including trees not managed by the city.

A. Identify principles and key goals for the plan update. Work with the community to develop principles and goals for the updated Plan and the Urban Forest Program. Guiding principles for the plan implementation are outlined in the background. Identify major challenges for Opa-locka in implementing this work. The Consultant team should plan to address social equity in the prioritization of tree planting across neighborhoods and in the outreach process; incorporation of all partners; and acknowledgment in preparation of a future Green Infrastructure Plan.

B. Key performance indicators. Recommend measurable key performance indicators for tracking progress on Plan goals (considering existing city goals), such as tree planting numbers, net tree gain and tree canopy coverage, increased native biodiversity, number of environmental justice priority community events, number of volunteer hours, and others with citywide goals. Propose policies and strategies that support the achievement of these goals.

C. Tree species and management recommendations.

1. The Plan should identify recommended street tree species appropriate for planting in the public right of way and park trees for planting in parks that meet criteria such as drought tolerance, groundwater table, Florida natives, root growth (minimizing impacts to adjacent public sidewalks and private sewer laterals), and height (many of the City's residential neighborhoods still have overhead power lines), and future climatic conditions.
2. Develop a tree species matrix that includes ratings for CO_2 storage, air quality benefits in terms of ozone, nitrogen dioxide, particulate matter and sulfur dioxide, shade, habitat, pest risk, and other ratings as appropriate. Include mature examples of each species.
3. Provide the City and stakeholders with guidance and recommendations in regard to the state of urban forestry best practices in the following areas at a minimum:

    a) Tree care & health
    b) Tree monitoring
    c) Tree protection, removal, and mitigation for public and private trees
    d) Integrating urban forestry into land use planning
    e) Water conservation considerations
    f) Tree shade and urban heat island mitigation
    g) Public and private utility conflict mitigation

4. Identify strategies to reduce tree maintenance and sidewalk repair costs and minimize tree/utility conflicts.
5. Outline recommendations for best management practices for declining trees and removal of public trees and outline any proactive mitigation strategies to minimize the need for removals.
6. Outline recommendations for the preservation of existing trees on private property, including requirements for removal.
7. Recommend supplemental tools/policies/practices toward increasing tree planting programs including increasing the use of tree zones with automated irrigation systems within the disadvantaged communities.

D. Recommendations for Staffing Structure, Function, Budget and Revenue for Urban Forest.
1. Based on community input from outreach efforts, what aspects of the City's urban forest program pose the greatest challenges and opportunities? What potential future investments are most and least preferred?
2. Recommend optimal staffing (mix of in-house, contract, other) to improve service and efficiency.
3. Determine a recommended budget for urban forest management to meet the desired level of service and plan goals, including ongoing community engagement.
4. Identify potential sources of revenue or support to increase funding and resources available to the Urban Forest.
5. Evaluate the current tree maintenance contract and specifications and make recommendations to align with the overall goals of the Urban Forest Plan and recommended staffing and programmatic needs.
6. Provide a comprehensive list of all applicable resources with the required competencies including staffing, tools, and software.
7. Recommended urban forest management strategies applying but not limited to the following: Reliability Centered Management, Just In Time, Optimal Prune Cycle and address Cost of Deferring Maintenance, Tree Growth Analysis, Pest Pressure and Loads and Other Environmental factors such drought, poor soil conditions and pathogen loads.

E. Challenges for maintaining a healthy urban forest. Climate change, rising groundwater, drought, and potential challenges to maintaining a healthy and vibrant urban forest. The plan should identify these and other challenges and suggest creative solutions to address identified challenges.

F. Recommendation for ongoing community input on urban forest management. Tree planting and care will not be a City endeavor alone – it will require the participation and investment of the community and partners. We want to build community leadership around tree caretaking. Recommendations may address:

1. Recommended actions regarding partnerships, outreach, programming, and community events. This can include Tree Care Academy, best outreach/communication practices, demonstration projects, and volunteer tree planting programs in public areas and Arbor Day/tree festival/community planting days.

2. Recommendations to educate residents about the urban forest, how it supports the city' climate mitigation and adaptation goals and how residents can be involved in supporting the urban forest, including information on what residents are allowed or required to do with public trees.

3. Strategies to encourage and assist residents, businesses, and private property owners to plant and properly maintain trees on their own property (including provision of free or rebated trees and MDC or City rebates).

4. With limited staff capacity at the City, a tree planting and maintenance program will need to be supplemented and supported by a community network. Identify some possible collaboration structures for staff, community volunteers, horticulture students, community partners, and organizations to work together on the tree planting program.

5. Possible partnerships with local businesses and nurseries to further support the community.

6. Recommendations on applicable community engagement resources, including staffing, tools and software.

G. Changes to City policies and related plans. Identify any recommended changes to current City policies, planning, and documents based on assessment of current policies and plans. Identify any areas that might be subject to improvements.

H. Inventory. Provide recommendations on expanding the City's tree inventory to include all city trees.

I. Plan evaluation and updates. Provide recommendations for the ongoing evaluation of the effectiveness of the Plan and guidance for the timing and process of updating the Plan.

II. MINIMUM QUALIFICATIONS

1. Consultants must meet the following minimum qualifications in order to be considered responsive to this RFP:
    a. As of the submission deadline, the consultant shall have a minimum of three (3) years of experience satisfactorily providing the same or similar services requested under this RFP. Prior experience working with municipalities or other public entities ispreferred.
    b. As of the submission deadline, the consultant shall be registered with Florida State and be in good standing.
    c. The project team must have experience with the development of at least three (3) other urban forest or tree plans.
    d. The project team must include ISA (International Society of Arboriculture) certified staff and Arborist.

2. Any consultant that does not meet these minimum requirements shall not be eligible to be considered for placement on the list of qualified on-call consultants.
   The proposal shall include the following items:
3. **Letter of Interest (10 points, 3 page maximum).** Please include in the submittal a letter introducing the consultant and expressing the consultant's interest in developing the Urban Forest Plan. The letter of interest should also include all of the following:
4. Provide the name of entity, its mailing address, telephone, email address. Please describe theorganization.
5. Indicate that the consultant has the availability and time to dedicate the personnel and resources necessary to provide on-call consulting services.
6. Indicate that the consultant has the minimum qualifications listed in Section III above.
7. Indicate the intention of the consultant to adhere to the provisions described in the RFP.
8. If selected to provide consulting services, the consultant will be expected to sign a service provider agreement with the City.
9. Please identify the contact person responsible for the submittal, specifying the name, title, and contact information.
10. Please note that the person signing the letter of interest must be a legal representative of the consultant authorized to bind the consultant to an agreement in the event of an award.
11. **Relevant Experience of Key Personnel and the Firm (15 points, 15 page maximum).**
12. Key Personnel Experience. The submittal must identify the key personnel that are to be assigned if awarded a contract, detailing their qualifications, areas of expertise, a summary of their past experience performing similar services for the City of Opa-locka or neighboring jurisdictions in the Miami Dade County Area, and a resume of each key personnel, including experience working with City staff, local community groups and decision-makers, and regional partner agencies.
13. Firm Experience. The submittal must describe the firm's pertinent project experience, including a list of performed relevant projects, past performance, individual or team accomplishments, and examples of similar work for the City or neighboring jurisdictions in the Miami Dade County area, including experience working with City staff, local community groups and decision-makers, and regional partner

agencies.

14. General Firm Information. General firm information including the number of employees, location of firm headquarters, branch offices, and number of years in business may also be provided.
15. **Scope of Services (50 points).** The Proposer shall prepare a complete description of the scope of services which the Proposer intends to perform in order to achieve the Project Objectives. The Proposer may identify services which differ from the scope of services if the Proposer believes the changes will assist the City in more efficiently and effectively achieving the City's stated Project Objectives. **Note in the scope of services the project management timeline, milestones, and team meetings.**
16. **Fee Schedule (20 points).** (Budget not to exceed $100,000.00 including but no limited to additional and/or optional tasks and services:
17. Estimated fee by task (tasks should match the scope of services section)
18. Hourly billing rate schedule for all proposed staff
19. Types and estimated amount of expenses to be billed to the project.
20. Fees by sub-consultant, by task.
21. **Anticipated Timeline. (5 Points)** The proposal shall include a general timeline for the Scope of Services.
22. **Client References (Pass/Fail).** Consultant must provide a minimum of four (4) client references. Please complete and include the Client Reference worksheet. The consultant's submission of a completed constitutes the consultant's express consent for the City to contact the listed references to inquire regarding the qualifications of the consultant.

PART III

PROPOSAL REQUIREMENTS

3-1 RULES FOR PROPOSALS

In order to maintain comparability and enhance the review process, proposals shall be organized in the manner specified below and include all information required herein. The proposal must name all persons or entities interested in the proposal as principals. The proposal must declare that it is made without collusion with any other person or entity submitting a proposal pursuant to this RFQ.

3-2 SUBMISSION OF PROPOSALS

The proposal shall be submitted on 8 ½ "x 11" paper, portrait orientation, with headings and sections numbered appropriately. Ensure that all information is written legibly or typed. The following should be submitted for a proposing firm to be considered:

3.2.1 Cover Page - Show the name of Proposer's agency/firm, address, telephone number, name of contact person, date, and the proposal number and description.

3.2.2 Tab 1 - Table of Contents

Include a clear identification of the material by section and by page number.

3.2.3 Tab 2 - Letter of Transmittal

3.2.3.1 Limit to one or two pages.

3.2.3.2 Briefly state the Proposers understanding of the work to be done and make a positive commitment to perform the work.

3.2.3.3 Give the names of the persons who will be authorized to make representations for the Proposer, their titles, addresses and telephone numbers.

3.2.3.4 Provide an official signature of a Corporate Officer certifying the contents of the Proposer's responses to the City's Request for Proposal.

3.2.4 Tab 3 - General Information

3.2.4.1 Name of Business.

3.2.4.2 Mailing Address and Phone Number.

3.2.4.3 Names and contact information of persons to be contacted for information or services if different from name of person in charge.

3.2.4.4 Normal business hours.

3.2.4.5 State if business is local, national, or international and indicate the business legal status (corporation, partnership, etc.).

3.2.4.6 Give the date business was organized and/or incorporated, and where.

3.2.4.7 Give the location of the office from which the work is to be done and the number of professional staff employees at that office.

3.2.4.8 Indicate whether the business is a parent or subsidiary in a group of firms/agencies. If it is, please state the name of the parent company.

3.2.4.9 State if the business is licensed, permitted and/or certified to do business in the State of Florida and attach copies of all such licenses issued to the business entity.

3.2.5 Tab 4 – Project Approach

Describe in detail your proposal to fulfill the requirements of the scope of services listed in section 2.2 of this RFQ.

3.2.6 Tab 5 – Experience and Qualifications

3.2.6.1 Specify the number of years the Proposer has been in business.

3.2.6.2 Identify the Proposer's qualifications to perform the services identified in this RFQ as listed in section 2-2 of the Scope of Services.

Include resumes, not exceeding one page each, of all key personnel who will be assigned to the City.

3.2.7 Tab 6 – Schedule

3.2.7.1 Include a timetable that identifies the amount of time required to complete each component of the Program.

3.2.7.2 Indicate the earliest available start date for your project team.

3.2.7.3 Indicate the project completion date based on the date provided in 3.2.7.1.

3.2.8 Tab 7 – Pricing of Services

3.2.8.1 Fee basis should be an all-inclusive, base fee.

3.2.9 Tab 8 – References

3.2.9.1 List a minimum of three (3) references in Florida for which the proposer has provided elevator services. Include the name of the organization, brief description of the project, name of contact person telephone number and email address.

3.2.10 Tab 9 – Additional Forms Proposers must compete and submit as part of its Proposal all of the following forms and/or documents.

FAILURE TO SUBMIT ALL OF THE ABOVE REQUIRED DOCUMENTATION MAY DISQUALIFY PROPOSER.

PART IV
EVALUATION OF PROPOSALS

4-1 SELECTION COMMITTEE

A Selection Committee, consisting of City personnel, will convene, review, and discuss all proposals submitted. The Selection Committee will use a point formula during the review process to score proposals and assign points in the evaluation process in accordance with the evaluation criteria. The Proposer shall satisfy and explicitly respond to all the requirements of the RFQ including a detailed explanation of how the services shall be performed.

Each proposal will be reviewed to determine if the Proposal is responsive to the submission requirements outlined in the Solicitation. A responsive Proposal is one which follows the requirements of this Solicitation which includes all documents are submitted in the format outlined in this Solicitation, is of timely submission, and has the appropriate signatures as required on each document. Failure to comply with these requirements may result in the Proposal being deemed non-responsive. The Contract (s) will be awarded to the most responsive proposer whose Proposal best serves the interest of and represents the best values to the City of Opa-locka.

4-2 EVALUATION CRITERIA

The Committee may select and choose to invite any and/or or all firms to make a presentation and be interviewed by the Committee as part of the evaluation process for this Solicitation. The Committee's decision will be communicated by staff to all Respondents. The Respondent's presentation may clarify but may not modify their submitted proposal. Any discussion between the presenter (s) and Evaluation Committee during presentations are intended only for purposes of providing clarification in response to questions from the Committee.

Categories	Points
Category 1. Experience: in public and private sector (minimum of 5 years of experience). Qualifications of the Project Team.	15
Category 2. SOW: The ability to meet the defined scope of work, plan, project approach, and methodology. References: three (3) required.	50
Category 3. Letter of Intent: The letter introducing the consultant and expressing the consultant's interest in developing the Urban Forest Plan.	10
Category 4. Timeline: The proposal shall include a general timeline for the Scope of Services.	5
Category 5. Fee schedule: Cost of proposal	20
TOTAL	100

4-3 ORAL PRESENTATIONS

Proposers may be required to make individual presentations to the City Selection Committee in order to clarify their proposals. Only those firms with the highest rated scores in accordance with the stated criteria and their weights will be invited to give oral presentations. However, the City has the right to accept the best proposal as submitted, without discussion or negotiation.

If the City determines that such presentations are needed, a time and place will be scheduled for oral presentations. Each Proposer shall be prepared to discuss and substantiate any of the areas of the proposal submitted, and its qualifications to perform the specified services. During the oral presentations, the Proposers should relate their discussion to the evaluation criteria, which will include (but not be limited to) their approach to the project. The proposed Project Manager must be in attendance.

The Evaluation Criteria may be changed for the oral presentation evaluation phase. References and site visits (if completed) shall be included in the final evaluation criteria, along with other criteria and weights as determined by the Selection Committee. Finalists will be informed as to the revised criteria, if any, prior to their oral presentation.

Additionally, prior to award of an Agreement pursuant to this RFQ, the City may require Proposers to submit such additional information bearing upon the Proposer's ability to perform the services in the Agreement as the City deems appropriate.

4-4 FINAL SELECTION

The City of Opa-locka will select the firm that meets the best interests of the City. The City shall be the sole judge of its own best interests, the proposals, and the resulting negotiated agreement. The City's decisions will be final. Following the notification of the selected firm, it is expected that an Agreement will be executed between both parties. City staff will recommend award to the responsible Proposer whose Proposal is determined to provide overall best value to the City, considering the evaluation factors in this RFQ.

4-5 AWARD AND CONTRACT EXECUTION

After review by the Selection Committee of the proposals and oral presentations a recommendation will be made to the City Manager for submission to the City Commission for final approval. Upon Commission authorization, contract negotiations will be initiated with the first ranked firm. If those negotiations are unsuccessful, the City will formally terminate negotiations with the first ranked firm and will commence contract negotiations with the next ranked firm, etc. Upon successful contract negotiations with the prevailing firm, the remaining firms will be notified that the process has been completed and that they were not selected.

PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: _____

   Address: _____

   City, State, Zip: _____ Phone/Fax: _____

2. Check One: Corporation ( ) Partnership ( ) Individual ( )

3. If Corporation, state:
   Date of Incorporation: _____ State in which Incorporated: _____

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:
   _____

5. **Name and Title of Principal Officers** **Date Elected:**

   _____ _____

   _____ _____

   _____ _____

   _____ _____

6. The length of time in business: _____years

7. The length of time (continuous) in business as a service organization in Florida:
   _____years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

PRICE PROPOSAL FORM

PROPONENT understands and agrees that the Contract Price is the lump sum to furnish and install all of the Work complete in place. Vendor's price will not be adjusted unless the CITY changes the scope of the Project after the Contract Date.

As such, the Vendor shall furnish all labor, materials, equipment, tools, superintendence, and services necessary to provide a complete, in place Project for the Proposed Price of:

LUMP SUM PRICE: $_____

SUBMITTED THIS _____ DAY OF _____ 2023.

BID SUBMITTED BY:

Company	Telephone Number
Name of Person Authorized to Submit Bid	Fax Number
Signature	Email Address
Title	

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature _____

Printed Name _____

CITY OF OPA-LOCKA
DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by_____ the
(Name)
_____ of _____
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

_____ _____
Date Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

_____ being first duly sworn, deposes and says that:

(1) He/She/They is/are the _____ (Owner, Partner, Officer, Representative or Agent) of _____ the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

_____ By: _____
Witness Signature

_____ _____
Witness Print Name and Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By:_____

Title:_____

Sworn and subscribed before this

_____day of_____, 20____

_____
Notary Public, State of Florida

_____
(Printed Name)

My commission expires:_____

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: _____

Authorized Signature: _____

Print Name: _____

Title: _____

Date: _____

Citywide Urban Forest Plan

RFP 23-1128200

Questions and Answers

ADDENDUM-01

This addendum is to answer questions on the RFP 23-1128200 Citywide Urban Forest Plan solicitation.

Please see the response below:

Do we need to provide 3 client references (RFP page 26) or 4 client references (RFP page 28)? **Please provide 3 client references.**

Where can we find the Client Reference Worksheet (mentioned on RFP page 28)? It was not included in the RFP. **Please disregard the Client Reference Worksheet and provide the reference as a separate attachment.**

Are there any elevator surfaces for this project (3.2.9.1 RFP page 28)? This is a typing error there are no elevator surfaces for this project. It shall read as follows:

3.2.9.1 List a minimum of three (3) references in Florida for which the proposer has provided Forestry Assessment Services. Include the name of the organization, a brief description of the project, the name of the contact person, telephone number, and email address.

Can the City please confirm that arborist services do not have the pricing restrictions subject to CCNA? **At the moment, the City does not have an arborist in place and pricing is not subject to CCNA. The total budget for this project is not to exceed $100,000.00.**

The RFP indicates that we are to use the City's inventory. What form is that inventory in? Does it include GIS data and when was it last updated?

The City has a GIS Inventory for recently planted trees. The purpose of the assessment is to update the database with all current trees installed and proposed alternatives to the City.

City Board and Commission meetings to present draft and final documents: Will the City accept virtual meetings for this or will the meetings be required in-person? **Virtual Presentations are allowed during the Commission Meetings; The City makes the request that at least a Company Representative be present during the Final Report Presentation.**

Does the City have a current tree canopy and landcover dataset that will be used for "Assess Private and Public Trees Resources" task? **The City does not currently have a landcover dataset. This will need to be created.**

What format is the City's existing inventory data in and how old is it**? The current data is available through the GIS Platform with recently planted trees.**

Does the City have an anticipated timeline for this project? Deadline for completion? **April 2024**

Does the City require that forms are signed in wet-ink? **The forms can be signed with an ink pen.**

CITY OF OPA-LOCKA
CERTIFICATION

REQUEST FOR PROPOSAL
RFP NO. 23-1128200
CITYWIDE URBAN FOREST PLAN

I, Joanna Flores, City Clerk of the City of Opa-locka, Florida, do hereby certify that sealed proposal(s) were received by 2:00 p.m. on November 28, 2023 and opened at the Opa-locka Municipal Complex, 780 Fisherman Street, 4th Floor, Opa-locka, Florida, at 2:16 p.m. this 28th day of November, 2023.

PROPOSAL(S) RECEIVED

	NAME/ADDRESS	LUMP SUM PRICE
1.	**Urban Canopy Works, LLC** **817 Dayton St** **Newport, Kentucky 41071** **Contact: Rachel Comte, Principal** **Ofc: 859.638.2044** **Emal: rachel@urbancanopyworks.com**	**$100,000.00**
2.	**Treesources, LLC** **3109 Grand Avenue, #297** **Miami, FL 33133** **Contact: Ian Wogan, President** **Ofc: 305.799.6319** **Email: ian@treesources.com**	**$98,000.00**
3.	**CNUC** **5930 Grand Avenue** **West Des Moises, Iowa 50266** **Contact: Josh Beaver, Senior Vice President** **Ofc: 515.398.0010** **Email: jbeaver@cnutility.com**	**$88,640.00**
4.	**PlanIT Geo, Inc.** **PO Box 1334** **Wheat Ridge, CO 80034** **Contact: Carrie Asselmeier, Proposal Coordinator** **Ofc: 630.333.5176** **Email: carrieasselmeier@planitgeo.com**	**$99,910.00**
5.	**Chen Moore & Associates** **3150 SW 38th Avenue, Suite 950** **Miami, FL 33146** **Contact: Brian Voelker, Project Manager** **Ofc: 786.497.1500 Ext. 1285** **Email: bVoelker@chenmoore.com**	**$87,660.00**

Please note that the all proposals were submitted via Demand Star (e-bid) and provided to the City Clerk by Procurement on Tuesday, November 28, 2023.

I further certify that proposal(s) were submitted and properly opened in the presence of the following:

Junior Bergel
Procurement Officer
City of Opa-locka

Joanna Flores, CMC
City Clerk
City of Opa-locka

CITY OF OPA-LOCKA

RFP NO: 23-1128200

Dec. 13, 2023 @ 2:00 P.M.

EVAL. MEETING, 780 FISHERMAN STREET, 4th floor, OPA-LOCKA, FL 33054

NAME	COMPANY NAME	EMAIL	PHONE #
Jay Bergel	City of Opa-locka	jbergel@opalockafl.gov	305-953-2898
R. Anathan	"	ranathan@opalockafl.gov	305-953-2868 x 1204
Yesly Guillen	City of Opa-locka	yguillen@opalockafl.gov	305-953-2868 x 1013.
Carlos Gonzalez	"	cgonzalez@opalockafl.gov	305 953 2868 1451
Adelina Gross	City of Opa-locka	agross@opalockafl.gov	305 953-2868-3004

EVALUATION FORM

RFP No. 23-1128200 Citywide Urban Forest Plan

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: Yesly Guitten

Date: 12/21/23

Signature: Guitten

Firm Name: URBAN CANOPY

Evaluation

Criterion	Rating
Experience	4
References & SOW	3
Letter of intent:	3
Timeline:	3
Fee Schedule	3

Notes:

Prime Consultant not registered to conduct business in Florida, Only the subs is registered. 5 years of experience. Not a local consultant & unfamiliar with the area. → Challenging for the Inventory. Proposed project period is too long.

Firm Name: CMA

Evaluation

Criterion	Rating
Experience	5
References & SOW	5
Letter of intent:	5
Timeline:	4
Fee Schedule	5

Notes:

28 years of experience. & experienced with 3 master Plans. Cons. will use existing inventory if data is fm less than 5 years. Community Outreach method: Online survey, paper copies distrib., In-person workshops. If received, info will be translated in Spanish & Creole for the workshops. Price tasks not itemized, but was the cheapest proposal.

Firm Name: PLANIT GEO

Evaluation

Criterion	Rating
Experience	4
References & SOW	4
Letter of intent:	5
Timeline:	4
Fee Schedule	4

Notes:

9 years of experience.
Provides inventory data, Software, Outreach & Planting Plan.
Local representation for the Planning Aspect. Public & Private experience.

EVALUATION FORM

RFP No. 23-1128200 Citywide Urban Forest Plan

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: Yesly Guillen **Date:** 12/21/23.

Signature: Guillen

Firm Name: CNUC

Evaluation

Criterion	Rating
Experience	5
References & SOW	5
Letter of intent:	3
Timeline:	3
Fee Schedule	4

Notes:

Big company with many active contracts nationwide. Too busy may be a challenge for accessibility & timely compliance. Consultant is not local. Okay to travel if needed. 24 years in business. & Authorized to do business in Florida.

Firm Name: TREESOURCE

Evaluation

Criterion	Rating
Experience	5
References & SOW	5
Letter of intent:	4
Timeline:	4
Fee Schedule	4

Notes:

Local Consultant with great experience, references, & qualifications. Very familiar with our area. Diversity Inclusion expertise beneficial for the outreach. Meeting on the ground, workshops, meetings & digital Platforms. Current Scope will not include a citywide inventory but an assessment of the existing. Price breakdown a little contradictual with Presentation, required services marked as additional services.

Firm Name:

Evaluation

Criterion	Rating
Experience	
References & SOW	
Letter of intent:	
Timeline:	
Fee Schedule	

Notes:

EVALUATION FORM

RFP No. 23-1128200 Citywide Urban Forest Plan

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: CARLOS GONZALEZ **Date:** 12-13-23

Signature:

Firm Name: URBAN CANOPY

Evaluation

Criterion	Rating
Experience	3
References & SOW	4
Letter of intent:	4
Timeline:	3
Fee Schedule	3

Notes:

- Based in Ohio - 5 yrs.
- $100,000
- Tree survey based on existing database.
- 12 months schedule.

Firm Name: CMA

Evaluation

Criterion	Rating
Experience	5
References & SOW	4
Letter of intent:	5
Timeline:	4
Fee Schedule	4

Notes:

- Certified arborist in Florida.
- $87,660 - 37 yrs.
- Good references.
- Experienced staff.
- 4 months schedule.

Firm Name: PLANIT GEO

Evaluation

Criterion	Rating
Experience	4
References & SOW	4
Letter of intent:	4
Timeline:	4
Fee Schedule	3

Notes:

- Certified arborist in Florida.
- $99,910 - 11 yrs.
- Good references
- Experienced staff.
- 5 months schedule.

EVALUATION FORM

RFP No. 23-1128200 Citywide Urban Forest Plan

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: CARLOS GONZALEZ **Date:** 12-15-23

Signature:

Firm Name: CNUC

Evaluation

Criterion	Rating
Experience	4
References & SOW	4
Letter of intent:	4
Timeline:	4
Fee Schedule	3

Notes:

- Certified arborist in Florida
- $98,172
- Based in Iowa - 24 yrs.
- Experienced Staff
- 6 months schedule

Firm Name: TREESOURCE

Evaluation

Criterion	Rating
Experience	4
References & SOW	4
Letter of intent:	4
Timeline:	3
Fee Schedule	3

Notes:

- Certified arborist in Florida
- $98,000.
- Experienced Staff. Good reference and project approach.
- 9 months schedule

Firm Name:

Evaluation

Criterion	Rating
Experience	
References & SOW	
Letter of intent:	
Timeline:	
Fee Schedule	

Notes:

EVALUATION FORM

RFP No. 23-1128200 Citywide Urban Forest Plan

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: ROBERT ANATHAN **Date:** 12-13-13

Signature: R. Anathan

Firm Name: URBAN CANOPY

Evaluation

Criterion		Rating	Notes:
Experience	15	4	18 years of experience - very good
References & SOW	50	2	Not prepared to do field work
Letter of intent:	10	5	All letters were the same. No standard
Timeline:	5	2	12 months - Too long
Fee Schedule	20	3	Most at $100,000 level

Firm Name: CMA

Evaluation

Criterion		Rating	Notes:
Experience	15	4	28 years of experience very good
References & SOW	50	4	Excellent plan. ~~Good~~ Extensive field work
Letter of intent:	10	5	All letters were the same. No standard
Timeline:	5	4	Three to five months OK
Fee Schedule	20	5	13% less than cost

Firm Name: PLANIT GEO

Evaluation

Criterion		Rating	Notes:
Experience	15	3	10 years of experience - very good
References & SOW	50	2	Plan was generic & lacked detail
Letter of intent:	10	5	All letters were the same. No standard
Timeline:	5	4	Five months - OK
Fee Schedule	20	3	Most at $100,000 level

EVALUATION FORM

RFP No. 23-1128200 Citywide Urban Forest Plan

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: ROBERT ANATHAN **Date:** 12-13-23

Signature: R Anathan

Firm Name: CNUC (INNOVATIVE SOLUTIONS)

Evaluation

Criterion		Rating	Notes:
Experience	15	5	90 years of experience - Head person appears to have valuable promises
References & SOW	50	4	Excellent plan
Letter of intent:	10	5	All letters were the same. No standard
Timeline:	5	4	Four months - Ok
Fee Schedule	20	3	Most at $100,000 level

Firm Name: TREESOURCE

Evaluation

Criterion		Rating	Notes:
Experience	15	4	Four years, but sub contractor very strong
References & SOW	50	4	Excellent plan
Letter of intent:	10	5	All letters were the same. No standard
Timeline:	5	3	Nine months - A little too long
Fee Schedule	20	3	Most at $100,000 level

Firm Name:

Evaluation

Criterion	Rating	Notes:
Experience		
References & SOW		
Letter of intent:		
Timeline:		
Fee Schedule		

RFP No. 23-1128200
Citywide Urban Forest Plan







Contact: Brian Voelker, M.S., SPWS, C.A., CLI

Project Manager
Telephone: +1 (786) 497-1500
Ext. 1285
Fax: +1 (786) 497-2300
bVoelker@chenmoore.com

Office Location:
3150 SW 38th Ave, Suite 950
Miami, FL, 33146

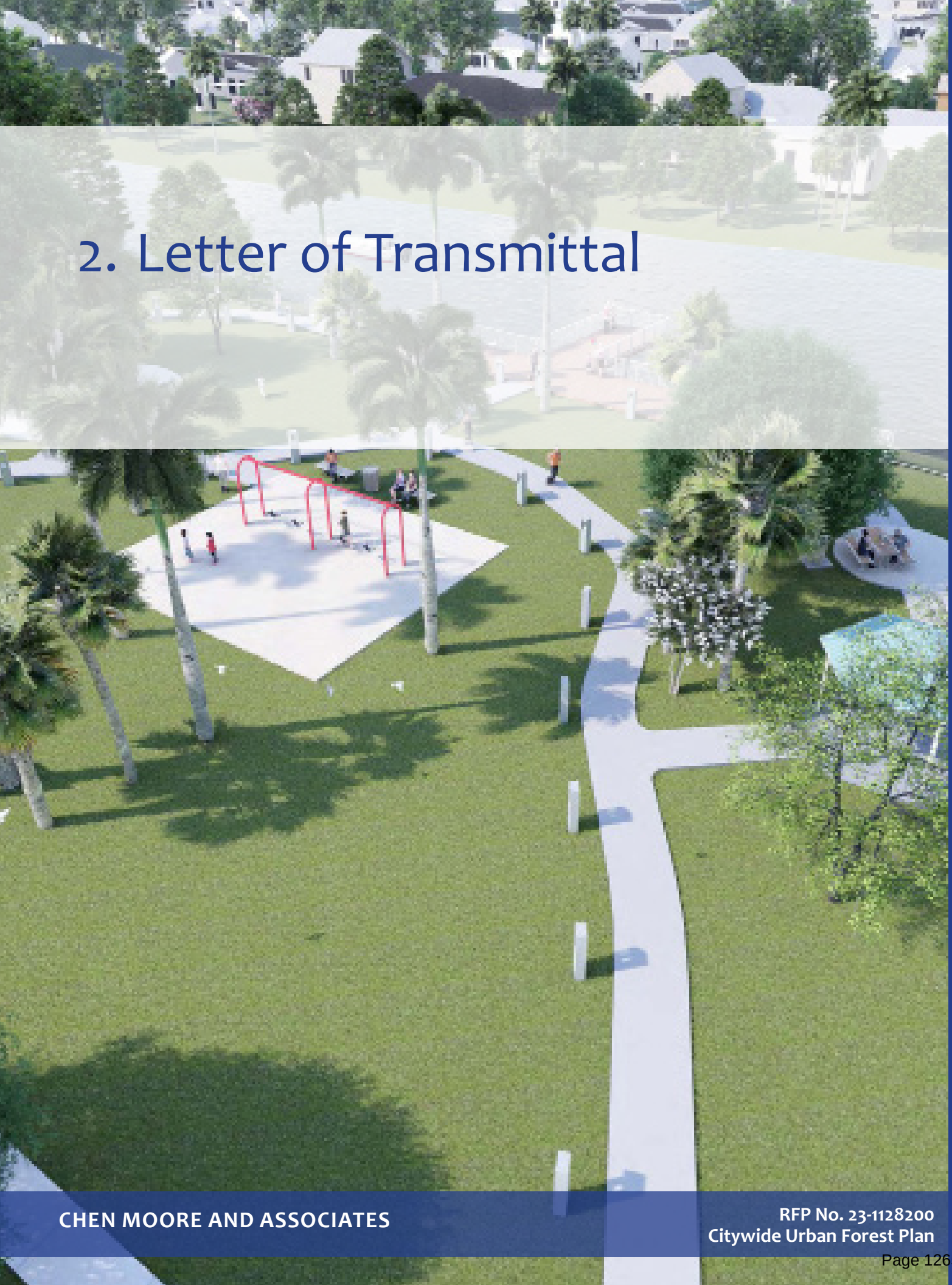
chen moore and associates

1. Table of Contents



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2. Letter of Transmittal

3150 SW 38th Avenue, Suite 950
Miami, FL 33146
Office: +1 (786) 497-1500

chen moore and associates

Letter of Interest

November 28, 2023

City Of Opa-Locka
Office of the City Clerk
780 Fisherman Street,4th Floor
Opa-locka, Florida 33054

Re: RFP No. 23-1128200 Citywide Urban Forest Plan

Dear Selection Committee,

Chen Moore and Associates (CMA) is pleased to submit our qualifications for the City of Opa-Locka (City) for the preparation of a City-Wide Urban Forest Plan.

For over two decades, CMA staff have provided expertise in arboriculture, urban forestry, landscape design, and planning services to serve the needs of municipalities and other client types throughout Florida. We have provided mater plans and management plans for urban forest resources for a variety of projects throughout southeast Florida, including City-wide urban forest resources, City-wide park systems, individual parks, and urban corridors. Our team includes ISA Certified Arborists, ASLA Professional Landscape Architects, planners, and GIS specialists, with active memberships in Florida ISA, ASLA, and the Florida Urban Forestry Council (FUFC) - including a Board of Directors position with FUFC. In addition, our team includes a public relations subconsultant with whom we've worked with extensively on our master plan projects.

CMA staff have prepared urban forest management plans for Delray Beach, Wellington, and Lake Worth. We have also prepared full city-wide or partial city-wide tree inventories for the following municipalities in south Florida alone: Marathon; Palmetto Bay; Miami; Miami Beach; Doral; Surfside; Margate; Deerfield Beach, Coconut Creek; Wellington; Delray Beach; Lake Worth. With this experience, we fully understand the scope of work associated with this project and are well prepared to execute the deliverables.

Services for this project will be based out of Miami office. Our team includes Principal-in-Charge Cris Betancourt, PLA, AICP, Brian Voelker (Project Manager, ISA Certified Arborist), Jason Sutton (Senior Landscape Architect, ISA Certified Arborist), Brittany Bourgault (Landscape Designer), Jennifer Eve Cook (Associate Planner), Sara Benasat (Associate Planner), Charmaine Emanuels (Associate Engineer/GIS Specialist), and our trusted public relations subconsultant (ETC Institute) - please see attached resumes for staff background and experience. With the assemblage of this team of multiple, highly seasoned arborists, landscape architects, and planners, CMA is committed to providing an exemplary urban forest plan in a timely manner.

We look forward to the opportunity to present our qualifications and approach to this project in more detail to the selection committee. I am authorized to represent CMA and hereby certify the contents of this proposal. Should you have any questions, please do not hesitate to contact me at (786) 497-1500, pmoore@chenmoore.com, or 3150 SW 38th Avenue, Suite 950, Miami, FL 33146.

Respectfully submitted,

CHEN MOORE AND ASSOCIATES, INC.

Peter Moore, P.E., F.ASCE, FACEC, President

3. General Information



TAB 3

GENERAL INFORMATION

3.2.4.1 Name of Business.

Chen Moore and Associates

3.2.4.2 Mailing Address and Phone Number.

3150 SW 38th Ave, Suite 950
Miami, FL, 33146
+1 (786) 497-1500

3.2.4.3 Names and contact information of persons to be contacted for information or services if different from name of person in charge.

Brian Voelker, M.S., SPWS, C.A., CLI, M: 954.559.6362 bvoelker@chenmoore.com

3.2.4.4 Normal business hours.

Monday - Friday 8am - 5pm

3.2.4.5 State if business is local, national, or international and indicate the business legal status (corporation, partnership, etc.).

CMA is a Florida based corporation. We have offices in:

- Fort Lauderdale
- Miami
- West Palm Beach
- Orlando Area
- Jupiter
- Jacksonville
- Sarasota
- Gainesville
- Tampa
- Port St. Lucie

3.2.4.6 Give the date business was organized and/or incorporated, and where.

November 7, 1986, Plantation, Florida

3.2.4.7 Give the location of the office from which the work is to be done and the number of professional staff employees at that office.

3150 SW 38th Ave, Suite 950

Miami, FL, 33146

Staff: 14

3.2.4.8 Indicate whether the business is a parent or subsidiary in a group of firms/agencies. If it is, please state the name of the parent company.

N/A

3.2.4.9 State if the business is licensed, permitted and/or certified to do business in the State of Florida and attach copies of all such licenses issued to the business entity.

Please see the following page.

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

7177168

RECEIPT NO.
RENEWAL
7457162

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
ACOSTA JOSE LUIS PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
ACOSTA JOSE LUIS PE
C/O CHEN MOORE & ASSOCIATES

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE63827

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles – Miami–Dade Code Sec 8a–276.

For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

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LBT

6597265

RECEIPT NO.
RENEWAL
6868062

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
MOORE PETER MICHAEL PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
MOORE PETER MICHAEL PE
C/O CHEN MOORE AND ASSOCIATES INC

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE58709

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
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MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

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7188144

RECEIPT NO.
RENEWAL
7469216

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
KAIMRAJH PATRICK DAVENDRA PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
KAIMRAJH PATRICK DAVENDRA PE
CHEN MOORE & ASSOCIATES INC

1

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE78535

PAYMENT RECEIVED BY TAX COLLECTOR
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MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

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7188143

RECEIPT NO.
RENEWAL
7469215

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
MENDEZ GREGORY A PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
MENDEZ GREGORY A PE
CHEN MOORE & ASSOCIATES INC

1

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE64718

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

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For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

State of Florida
Department of State

I certify from the records of this office that CHEN MOORE AND ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on November 7, 1986.

The document number of this corporation is J41454.

I further certify that said corporation has paid all fees due this office through December 31, 2023, that its most recent annual report/uniform business report was filed on August 23, 2023, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-third day of August, 2023

Secretary of State

Tracking Number: 3349928913CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

4574266

RECEIPT NO.
RENEWAL
4775459

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
CHEN MOORE AND ASSOCIATES INC
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
CHEN MOORE AND ASSOCIATES INC
C/O MOORE PETER M
Employee(s) 12

SEC. TYPE OF BUSINESS
212 P.A./CORP/PARTNERSHI P/FIRM

EB4593

PAYMENT RECEIVED BY TAX COLLECTOR
54.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles – Miami–Dade Code Sec 8a–276.

For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

4. Project Approach



TAB 4

PROJECT APPROACH

As we understand it, the fundamental goal of the Urban Forest Plan (UFP) is to improve and expand the City's urban forest, and to create a more equitable distribution of trees across all the City's neighborhoods and socioeconomic groups. The UFP will evaluate the status of the City's urban forest, establish a clear set of priorities and objectives, and provide a framework for the management, maintenance, and enhancement of trees throughout the City. The following is a summary of our proposed work efforts towards providing the City with the UFP.

1. Project Management

Brian Voelker will serve as our Project Manager and lead technical advisor in the development of the UFP. Mr. Voelker is an ISA Certified Arborist, LIAF Certified Landscape Inspector, and Board Member with the Florida Urban Forestry Council; Mr. Voelker is well versed in the field of urban forest management and has presented on this topic on several occasions, most recently the March 2023 FUFC Urban Forestry Institute seminar. Project management efforts to be performed by Mr. Voelker will include:

- Administer regular project coordination meetings with City staff throughout the duration of the project. This effort will include scheduling of meetings, preparation of meeting agendas, attendance at meetings, and the preparation and distribution of meeting minutes to City staff.
- Administer public outreach meetings. This effort will include the following: coordination with City staff regarding scheduling and meeting venues; preparation of presentation materials for meetings (i.e. PowerPoint presentations); preparation of meeting minutes; preparation of report summarizing public input from meetings. These meetings will be in-person but will include the option of virtual attendance (e.g. via Zoom link).
- Preparation of draft and final UFP, incorporating input from the City, as well as feedback from public outreach meetings.
- Preparation of a work plan and project schedule:
  - CMA will prepare a work plan including each sub-task within the overall project scope, along with proposed completion dates for each sub-task. Adherence to each "milestone" date will ensure that the project remains on track with the overall deadline.
- Preparation of monthly invoices with progress reports (or estimated percent complete for overall project)

2. Analysis of Current Status, Challenges, and Opportunities

Assess City Policies and Documents

CMA will review existing City documents related to urban forestry, including the City's Landscape and Tree Protection and Conservation codes, the Community Development Master Plan, and the Climate Action and Resiliency Plan, to ensure that UFP goals and objectives are in conformance with the goals and objectives outlined in these documents. CMA will also directly coordinate with "stakeholder groups" (e.g., City staff, City Council and Advisory Commissions, non-profit groups, residents, etc.) to understand the unique and specific urban forestry management efforts/goals from each group. Gathering input from each of these groups will allow us to identify potential conflicts in management efforts and goals/objectives between the groups. Details for the approach for obtaining stakeholder input are included in Section 3 below.

Assess Program Structure, Function, and Budget

CMA will review and evaluate current the City's current tree maintenance efforts. This will include the following evaluation of maintenance efforts (i.e., level of training, skill sets, etc.) from both the City's in house staff and contracted arborist services relative to the actual urban forest maintenance needs identified in the UFP. CMA will also evaluate the City's current budget for tree maintenance efforts and identify budget modifications that may be required to incorporate all long term maintenance needs identified in the UMP.

This effort will also include the evaluation of potential grant funding opportunities to develop an improved maintenance department (i.e., funding for staffing, training, etc.).

Assess Current City Public Tree Resources (Streets, Easements, Open Space, and Parks)

Analyze individual tree data on City properties:

- Review existing tree data using GIS software to evaluate the following:
  - Species composition/resiliency (e.g., native vs. non-native, wind resistance, flooding and saltwater intrusion resistance).
  - General tree conditions by species, common defects.
  - Tree/infrastructure conflicts.
  - Tree sizes/ages relative to planting spaces (i.e., evaluate where trees may be outgrowing their spaces).
  - Presence of pests/diseases by species.
  - Maintenance requirements.
  - Calculate annual monetary benefits (using the i-Tree "Eco" program) and compare these benefits to annual maintenance costs.

Assess Private and Public Trees Resources (Canopy Cover Analysis)

CMA will perform canopy cover analyses using the i-Tree Canopy program. These analyses will include the following:

- City wide canopy cover analysis (area and % cover); this will include a calculation of structural values and annual ecosystem benefits (i.e., carbon sequestration, stormwater capture, pollutant uptake, etc.).
- Canopy cover analyses for individual census tracts, including canopy area and percent cover and annual benefits for each individual tract.
  - A tree equity analysis may then be performed through comparison of resulting values between census tracts. This will lead to the generation of a preliminary tree planting plan prioritized by census tracts with the lowest tree canopy cover.
- Provide an overview of primary threats to the urban forest (City-wide); this effort will include random field sampling for an evaluation of existing tree conditions and observed biotic and abiotic defects.
- Provide an overall assessment of the City's urban forest ecology using the Nature Serve's Ecology Integrity Assessment Method, US Forest Service's Forest

3. Stakeholder Participation and Outreach

Pending completion of Task 2 (analysis of current status, challenges and opportunities), CMA will develop and administer an outreach plan. We will work closely with our trusted public relations subconsultant (ETC Institute) to identify stakeholder groups (e.g., local partners and community groups) and engage with them through multiple outlets, which will include the following:

- Develop a publicly accessed, web-based portal (Google Drive folder or equivalent hosted by CMA) with content including:
  - Outline of UFP goals and objectives
  - Urban forest ecosystem and human health benefits
  - Guidelines on how residents can contribute to the success of the urban forest though the proper selection, installation, and management of trees on their own properties.
- Collecting input from stakeholder groups through surveys
  - CMA/ETC will conduct a pilot test with no fewer than 50 residents. The survey will only be administered to households within the City. A findings report will include an executive summary,

charts and graphs, benchmarking comparisons, priority investment rating analysis, and tabular data. Results will be consolidated and posted on the web portal.

  - CMA/ETC will then complete a full survey that is statistically valid and representative of the population of the City, both demographically and geographically.

- Prepare for and administer in person public outreach meetings. The intent of these meetings will be to gain feedback on the UFP goals and objectives from both City staff and the public. CMA will coordinate with City staff to verify the most suitable/appropriate venue options. CMA will prepare agendas and presentation materials (e.g., PowerPoint presentation) and record minutes from these meetings. Our proposed scope/fee will include up to six meetings but can be modified to include additional meetings upon request.

4. Urban Forest Plan Development

Pending completion of stakeholder input, CMA will prepare the draft UFP. The following list of proposed UFP components is based upon the RFP requirements, as well as CMA's extensive urban forestry experience and understanding of the unique efforts and challenges of managing trees in south Florida's urban areas.

- Understanding of the community vision for the urban forest:
  - This will include providing a summary of all City staff and public feedback on the UFMP provided during public meetings and from the public survey.
- Overview of the current status of urban forest resources (i.e., summary of data obtained in Section 2).
  - Address potential tree equity issues by prioritizing proposed tree plantings in census tracts with lower relative canopy coverage.
- Urban forest goals and improvement strategies (based on CMA's experience and City staff/public feedback):
  - Create tree canopy cover goals (City-wide percent cover and percent cover within each census tract).
  - Tree plantings strategies:
    - Estimates for #'s of trees required to obtain annual increases in percent canopy coverage over a three-to-five-year time period.
      - ◊ Discussion of available planting spaces/locations for these proposed plantings.
    - Design elements to accommodate large shade trees in urban spaces (e.g., suspended pavement systems).
    - Removal and replacement of nuisance/exotic trees.
    - Creation of a species selection guide developed by our certified arborists and landscape architects that address both resiliency (native, wind and flooding tolerant, disease/pest resistance) and aesthetics and community cohesiveness (i.e., acknowledging historic and current species assemblages by community). This guide will also include ecosystem benefits per tree species (e.g. CO_2 uptake, pollutant removal, etc.).
  - Tree Maintenance:
    - Develop tiered maintenance program based on tree conditions (e.g., removal and replacement of trees with an elevated risk of failure would be prioritized over remediation efforts [pruning, fertilization] for trees in fair or better condition).
  - Tree Planting and Maintenance Funding
    - CMA will work to identify grant funding opportunities for implementation of all tree canopy improvement strategies and proposed maintenance efforts identified in the UFP.

- Tree Protection Measures:
    - Ensure City's Landscape and Tree Protection and Conservation ordinances have the latest BMPs for tree protection and preservation incorporated and ensure that the UFMP goals and objectives align with the ordinance. The UFMP may include recommended updates to the ordinance if UFMP goals/objectives are not supported by or reflected in the ordinance.
    - Examine ordinance for expansion on or inclusion of various items:
        - ◊ Minimum soil volume requirements.
        - ◊ Inclusion of excessive root pruning under "tree abuse".
        - ◊ Infrastructure guidelines for tree protection (e.g., root barriers; at-grade or elevated sidewalk designs to avoid/minimize root impacts; etc.).
- Development of a Landscape Technical Manual (LTM)
    - The LTM would include the following components:
        - ◊ Species selection guide and species grading guidelines.
        - ◊ Tree installation Best Management Practices (BMPs).
        - ◊ Maintenance guidelines (pruning, fertilization).
        - ◊ Tree protection measures during construction.
        - ◊ Water conservation strategies for landscape establishment.
        - ◊ Tree mitigation guidelines.
        - ◊ Guidance for integrating urban forestry into land use planning.
        - ◊ Guidelines for mitigating tree conflicts with utilities.
        - ◊ Guidelines for tree planting to mitigate urban heat island effect.

- Future Planning
    - Set goals for future tree inventories and canopy cover analyses to evaluate urban forest resources relative to success criteria outlined in the UFP.
        - Identify programs/software for inventories, canopy cover analyses, and overall urban forest functional value assessments.
        - Identify potential public/private partnerships with non-profit groups with a focus on increased tree plantings and improved tree care on both municipal and private properties. This effort can include organizing and planning public events including tree planting/care educational seminars and tree giveaways.
        - Identify potential financial incentive programs to encourage public tree plantings on private properties.
        - Identify opportunities for agreements with outside (non-City) entities to provide long term tree maintenance on certain City properties.

5. Experience and Qualifications



EXPERIENCE AND QUALIFICATIONS



3.2.6.1 Specify the number of years the Proposer has been in business

3.2.6.2 Identify the Proposer's qualifications to perform the services identified in this RFQ as listed in section 2-2 of the Scope of Services

Founded in 1986, Chen Moore and Associates (CMA) specializes in civil engineering, water resources, water and sewer, landscape architecture, electrical engineering, transportation, planning and irrigation, environmental and construction administrative services. With the recent addition of Fred Wilson and Associates (opened in 1962) during the 3rd quarter of 2021, the combined firm has now officially been in business for over sixty (60) years. The firm commits to providing responsive quality services while meeting the schedules and specific project needs of our clients. The firm has its headquarters in Fort Lauderdale, Florida. CMA has offices throughout Florida, including regional offices in Miami, West Palm Beach, Orlando (Maitland), and Jacksonville. CMA has additional Florida offices in Sarasota, FL, Gainesville, FL, Tampa, FL and in Atlanta, GA. The firm commits to providing responsive quality services while meeting the schedules and specific project needs of our clients.

Landscape Architecture and Planning Services

- Parks and Recreation Planning and Design
- Master Planning
- Site Planning Design and Processing
- Irrigation Design
- Community Planning
- Urban Redevelopment
- Comprehensive Planning
- Campus Planning and Design
- Due Diligence and Feasibility Reports
- Land Use Entitlements
- Landscape Planning and Design

- Hardscape Feature Design
- Streetscape Design
- Greenway and Trails Design
- Wayfinding
- Lighting Design
- Graphic Design and Presentation
- Habitat Restoration

CMA's landscape architecture and planning team provides creative solutions for a diverse clientele. The team is currently working on healthcare, private development, and government projects. CMA is known and respected for our thorough understanding of site and permitting constraints prior to commencing a project. We are highly responsive and provide out-of-the-box solutions to our clients' needs.

Design Philosophy

Public landscapes, whether in the form of parks, streetscapes, or other municipal facilities, serve multiple purposes. They provide beautification, shade, habitat for wildlife, they improve water quality, and they can serve as educational spaces informing the public of our need to care for our natural resources. They improve our quality of life and enhance the urban experience. Our approach to landscape architecture is to understand a client's ability to maintain the spaces we create. The design and its implementation represent a fraction of the works anticipated life. We work closely with you to make certain inherited facilities can be maintained for the long-term benefit of your community. Landscapes and infrastructure should be sustainable socially, environmentally, and economically.

CMA believes parks play a vital role in our communities. Parks lay a healthy foundation for community development. They can catalyze community revitalization, engage the community, and support economic development through enhancement of property values and increased municipal revenue. Parks can promote tourism by providing venues for special events, festivals, and sports tournaments and often contain special facilities such as zoos, memorials, or significant cultural artifacts. Socially, parks create safer neighborhoods and provide an environment where people can connect with nature and benefit from physical activity, social interaction, and a cleaner environment raising their quality of life. Physically, our parks shape our environment and help to define our public realm by providing open space that preserves vital ecological functions, protects biodiversity, buffers incompatible land uses, and reduces public costs for stormwater management, flood control, and other forms of public infrastructure.







In the last five years, we have provided services on the following types of projects to public sector clients:

- Coastal Parks (requiring permitting through FDEP)
- Urban Parks (accommodating green markets, art, culture and community festivals)
- Active Parks with recreation facilities (Baseball, Soccer, Basketball, Volleyball, Tennis, Pickle Ball, Multi-Use Fields)
- Site Plan processing for community redevelopment projects and private

development sites
- Wayfinding Strategies
- Streetscape Design and Implementation
- Complete Streets Conceptual Design and Implementation
- Irrigation Studies and Implementation of Irrigation Central Control for municipalities and universities
- Urban Tree Canopy Studies
- Plans Review

Utility Design

CMA has worked with public, semi-public and private clients to provide a wide range of water and sewer consulting engineering services including large-scale master planning and modeling, existing system assessments, design and rehabilitation, and new site development design, permitting and construction. Our experience includes the planning, design, permitting and construction of over 100 miles of water main, 100 miles of gravity sewer, 40 miles of force main, over 250 pump stations (ranging from 100 gpm to 5,000 gpm), five large diameter mains in FDOT rights of way (20" to 48" force main) and 60 directional drills. The following are some examples of our utility capabilities:

- Water/Sewer Distribution/Collection/ Transmission System Modeling
- Master Planning
- Pump Station Rehabilitation and Design
- Water Supply, Treatment and Distribution
- Wastewater Collection, Transmission, Treatment, Re-use and Disposal
- Trenchless Technology Analysis
- Pipe Lining and Rehabilitation
- GIS Analysis
- Odor Management
- Government Agency Permitting and Coordination
- Cost Estimating



Stormwater Engineering, Planning and Management Services

The CMA Team is prepared to offer the City our complete breadth of stormwater services. Our team of local engineers can offer the City both traditional civil engineering support and an entire range of planning, modeling, and GIS support for your stormwater projects. A sampling of our stormwater experience includes:

- All Aspects of Stormwater System Design
- Modeling (Both Water Quantity and Quality)
- Geographic Information Systems for Stormwater Projects
- Floodplain Assessment and Management Plans
- Stormwater Master Planning
- Watershed Assessments
- Permitting Support
- Regulatory Support
- Government Agency Permitting and Coordination
- Public Outreach and Education
- Cost Estimating



Transportation Engineering and Streetscape Design

CMA understands that successful urban environments are composed of a number of elements that must be seamlessly integrated. Development must be pedestrian friendly and encourage street level activity. Vehicular circulation must be carefully orchestrated to calm traffic and provide a variety of discrete parking solutions that maintain the urban fabric and promote density. Historic structures must be preserved and civic spaces revived. Identity and clarity should be enhanced with streetscape improvements, attractive landscaping, and wayfinding systems

Great neighborhoods, and by extension, great

cities, are remembered for their streets rather than their buildings. CMA integrates this philosophy into our streetscape design. Great streets form the glue that holds a successful community together. Our philosophy of community and street design involves organizing a hierarchy of streets to respond to the varying urban use and density conditions and establishing appropriate standards for each street type. Some of the CMA transportation and streetscape design experience includes:



Streets and Highway Design

- Traffic signal design and analysis
- Street lighting design
- Master Planning
- Geometric Intersection Design
- Conceptual Design and Alternatives Analysis
- Maintenance of Traffic Design
- Pedestrian and Bicycle Pathway Design
- Operational and Safety Studies
- Land Use Plan Amendments
- Traffic Calming Design
- Circulation and Roundabout Design
- Corridor Planning
- Streetscape Design
- Hardscape Design
- Cost Estimating

Electrical Engineering

The firm engineers have a broad range of experience



- Substation engineering services include:
- Physical station layout & design
- Substation Bus Design
- Substation Equipment Specifications (Autotransformers, HV Breakers, CCVTs, etc.)
- Design of incoming and outgoing transmission and distribution lines
- Design of lightning protection and grounding systems
- Complete site development (including design of foundations, grading and drainage, water/sewer utilities, control building and site access roads)
- Permitting and regulatory compliance such as Spill Prevention Control & Countermeasures (SPCC)
- Construction & bidding engineering services

In conjunction with substation design, we provide comprehensive engineering services for protective relaying and controls in new as well as in existing substations of varying complexity. The firm engineers have a broad range of experience implementing various protective relaying schemes associated with Transmission Lines, Distribution Lines, Power Transformers, Capacitor Banks and Substation Bus. The firm engineers recognize that each client has different requirements that require some flexibility and a detailed understanding of the specific protective fundamentals. We provide complete Protective Relaying and Control solutions tailored to meet our specific client's needs.

- Relay and controls, metering and communication engineering services include:
- Complete relay system coordination
- Comprehensive Protective Relaying & Controls Design (including drawings, specifications, settings and commissioning)
- Design of microprocessor-based, electromechanical and solid-state systems
- Design of relay upgrades for distribution automation
- SCADA Systems Design
- Communications Design (including fiber-optic, radio and microwave systems)
- Relay Settings, Test Plans and Commissioning Support

- ASPEN OneLiner Modeling
- Substation Bus Design
- Substation Equipment Specifications (Autotransformers, HV Breakers, CCVTs, etc.)
- Design of incoming and outgoing transmission and distribution lines
- Design of lightning protection and grounding systems
- Complete site development (including design of foundations, grading and drainage, water/sewer utilities, control building and site access roads)
- Permitting and regulatory compliance such as Spill Prevention Control & Countermeasures. (SPCC)
- Construction & bidding engineering services

Construction Administration Services

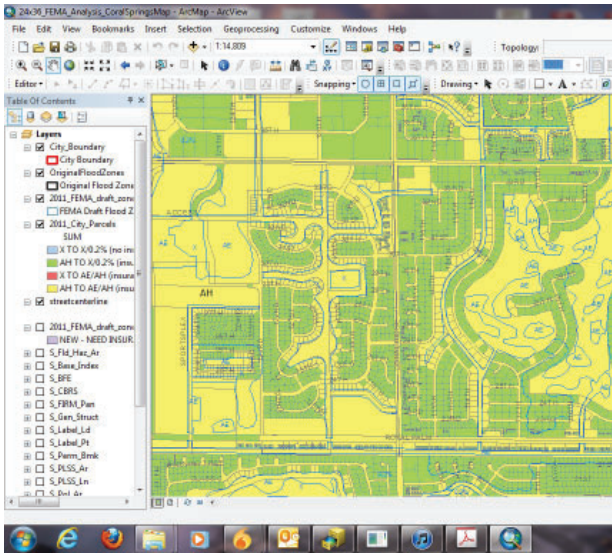
At CMA, the engineers work very closely with the in-house inspectors, allowing a different point of view when interpreting construction documents. Considerable experience has been gained due to the fact that all engineers involved in infrastructure design have had field experience performing construction management services. The lessons learned in the field are incorporated into design, and the engineers have the knowledge to make educated decisions about the acceptability of the work.

The CMA team realizes that even with the best planning, pre-investigation, design and communication, changes can occur during construction. The most effective way of dealing with change orders is to try to anticipate them, quickly provide alternative solutions that are acceptable to both the Client and Contractor, and negotiate with both entities to minimize additional costs. Often times, changes can be made on site without the need for the change order process. CMA has built a reputation of administering projects in a way which minimizes change orders and the costs associated with them. The following are services CMA commonly performs during construction:

- Bidding Assistance
- Preconstruction Services
- Value Engineering
- Scheduling
- GIS/GPS Report Integration
- Administration
- Testing
- Construction Monitoring
- Construction Engineering Inspections
- Construction Management
- Bond Releases



GIS Services



CMA understands the importance of having as-built information provided by the contractor after the installation of the infrastructure and having it be accurate. This is why CMA has designed a field application that our inspectors can use in the field to log the infrastructure information into GIS in real time from their smart phones. ARC GIS Online Maps are created for the project which includes the design information and parcel information. Through a series of drop boxes and fields the inspector can click on the line being installed and put the required detailed information such as date installed length of pipe, elevations and coordinates will be adjusted. The application also allows for pictures to be added to the points. This will not only make it easy for us to pull reports and updated maps quickly but it will also make it easy for us to check the contractor's as-

builts as they come in.

Grant Writing Abilities

CMA has a long history of working with municipalities to enhance projects with grant funds. Often, simply by being aware of available funding sources, CMA has assisted various clients with obtaining multi-year grants. Examples of three relationships are as follows:

- ***FEMA Hazard Mitigation Fund Grants (HMGP):*** In working with the City of Coral Springs, CMA has managed three separate HMGP grants for both hardening of public facilities and flood protection.
- ***Community Development Block Grants (CDBG):*** CMA has worked on over seven projects with the City of Dania Beach funded by CDBG. These include traffic calming, streetscaping, flood protection and solar street lighting.
- M***arine grants:*** For the City of Fort Lauderdale's 15th Street Marina Project, CMA assisted the City in obtaining Florida Inland Navigation (FIND) grants and a Broward Boating Improvement Program (BBIP) grant to double the scope of the project.

CMA also has experience with assisting our clients with obtaining grants and loans including:

- ARRA Compliance
- CDBG Compliance
- State Revolving Loan Loans
- FIND Grants
- FRDAP Grants
- FEMA HMGP
- FDEP 319H Grants

The firm has researched grant applications, coordinated with the grant project manager and has administered progress reports and additional accounting for our clients including the Towns of Hypoluxo and Davie. CMA administered $373,000 for the Town of Davie's 319 Grant. In addition, CMA helped secure $357,151 for the Hypoluxo Shores project and $686,483 for the Hypoluxo Point project from the Florida DepartmLicenses/Certificationsent of Environmental Protection.



Environmental Services

- Wetland delineations, function evaluation, monitoring, and mitigation design
- Environmental resource permitting (through federal, state, and local agencies) for a variety of project types:
  - Roadways, parks, shoreline projects, bridges, utilities, etc.
- Benthic resource surveys
- Protected wildlife assessments (including Florida bonneted bat)
- GPS data collection/mapping and GIS database development
- NEPA/PD&E document preparation and reevaluations
- Certified sUAS/drone pilot services
  - Videography
  - Wetlands monitoring
- Consulting arborist services
  - Urban forest management plans
  - GPS tree inventories
  - Tree removal permitting
  - Tree value estimates and tree grading
  - Tree Risk Assessment (ISA - TRAQ)
  - Analysis of tree canopy cover and ecological/ monetary benefits
  - Mangrove trimming oversight

Key Personnel

All individuals on our project team are committed to providing the City with a well planned, designed and implementable project. CMA recognizes the City of West Miami as an important potential client. We want to develop a solid relationship and become your "Trusted Advisor" for tree inventories. Our staff has been carefully selected to meet and exceed the City's expectations for the project. Please refer to our 330 resumes in Section E for detailed information, including our resumes, for the required information about our team.



Cristobal Betancourt, PLA, AICP is CMA's Vice President of Landscape Architecture and Planning. He has experience providing planning and landscape architecture design solutions for public and private sector clients. His team provides a full range of services starting with due diligence and master planning culminating in detailed site design. Cris is an experienced parks designer and is currently leading the redevelopment of Currie Park for West Palm Beach and the Parks and Recreation System Master Plan for the City of Miami. Cris will lead public engagement for the project and ensure that CMA's Project Manager receives sufficient resources and support to complete the project on time and budget. Cris will serve as Principal-in-Charge for this contract and his contact information is cbetancourt@chenmoore.com; telephone: (786) 497-1500 ext. 1078.



Brian Voelker, M.S., SPWS, C.A., CLI is a Senior Environmental Scientist specializing in natural resource assessments and permitting, as well as certified arborist services. He provides numerous ecological services to clients, including the following: wetland delineation, function evaluation, mitigation design, monitoring, and permitting; upland habitat assessments; coastal habitat assessments and permitting; marine and estuarine habitat assessments and permitting; protected wildlife assessments and permitting; GPS data collection/mapping and GIS database development; NEPA document preparation and oversight; sediment and erosion control monitoring. Brian will serve as Project Manager for this contract and his contact information is bvoelker@chenmoore.com; telephone (786) 497-1500 ext. 1285.



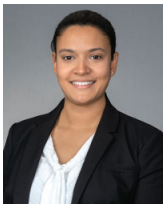
Jason SUtton, PLA, C.A. is a Principal Landscape Architect for CMA's landscape architecture team. He is proficient in Florida's plant palette, local environmental conditions, and site-specific microclimates used to prepare aesthetic and functioning landscape designs. He also brings experience with environmental and wildlife monitoring adding significant field knowledge to our team. Mr. Sutton is well versed in the use of low-impact development techniques specifically applied to site planning, and has extensive experience with parks and recreation facilities throughout Florida for public and private sector clients domestically and internationally, providing design, permitting, and construction observation services for many types of improvements, including numerous transportation projects; municipal parks; streetscapes; VA National Cemeteries; athletic fields; pedestrian, bicycle, and equestrian trails; site amenities; playgrounds; boating and aquatic facilities; resort properties; themed wayfinding; amphitheaters; landscape; hardscape; and irrigation.



Brittany Bourgault is a landscape architect for CMA's landscape architecture team. Her professional experience includes working closely with different municipalities throughout Florida, conducting code research and analysis while implementing code compliant site plan, masterplans, and landscape designs. She is proficient in Florida's plant palette, local environmental conditions, and site-specific microclimates used to prepare aesthetic and functioning landscape designs. She is also experienced with creative design solutions/ Cure Plans for landowners working with FDOT through right-of-way takings/eminent domain proceedings.



Jennifer Cook is an associate planner with CMA's landscape architecture team. She provides planning, design and production support to the team responsible for producing plan and section renderings and graphics, and realistic 3D renderings and fly-through videos. Ms. Cook is proficient in Florida's plant palette, local environmental conditions, and site-specific microclimates used to prepare aesthetic and functioning landscape designs. Ms. Cook is also a horticulture specialist, certified in permaculture design with an emphasis in master planning agricultural facilities. She is well versed in the use of low-impact development techniques specifically applied to site planning, and has experience with parks and recreation facilities throughout Florida for public and private sector clients, providing design, permitting, and construction observation services for many types of improvements.



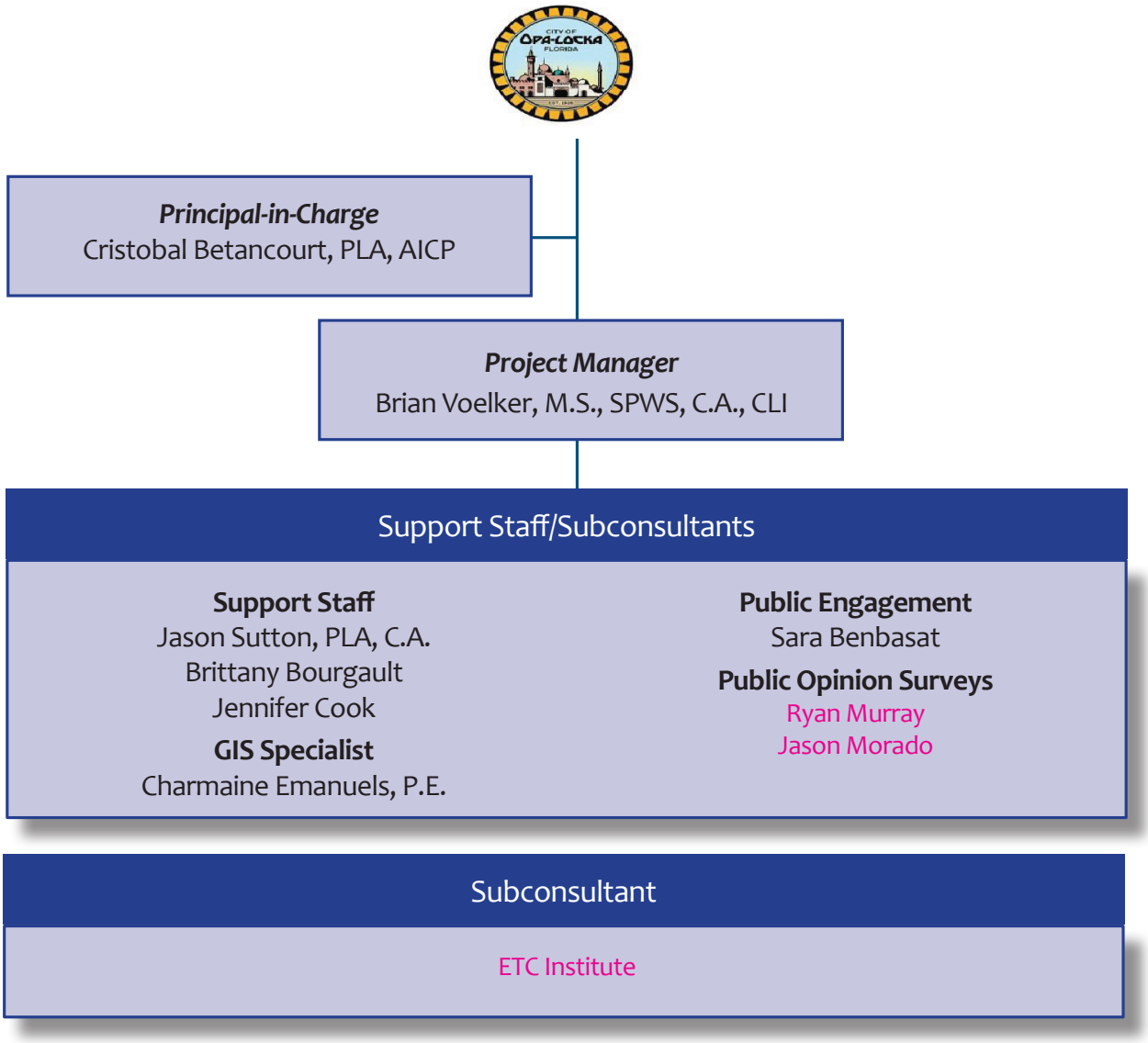
Charmaine Emanuels, P.E. serves as a Project Engineerfor CMA's engineering team and has experience working on various aspects of civil engineering design, plan preparation, permitting efforts, and construction oversight while leading segments of the project design. Her experience includes utility coordination; performing modeling and simulation; site grading; pavement analysis; water distribution system; sanitary sewer collection system; lift station design; stormwater management system and drainage analysis; roadway design; maintenance of traffic and phasing; pavement marking; signage; and erosion control. She also prepares meeting agendas, meeting minutes, and estimates of probable cost including quantity takeoffs.



Sara Benbasat has experience with site plan development review in municipal planning. Ms. Benbasat also has contributed to staff reports, project proposals, conceptual renderings, and company marketing.

ETC Institute is a 102-person market research firm that specializes in the design and administration of market research for governmental organizations. Their major areas of emphasis include citizen satisfaction surveys, parks and recreation surveys, community planning surveys, business surveys, transportation surveys, employee surveys, voter opinion surveys, focus groups, and stakeholder interviews. Since 1982, ETC Institute has completed research projects for organizations in 49 states. ETC Institute has designed and administered more than 3,500 statistically valid surveys and their team of professional researchers has moderated more than 1,000 focus groups and 2,000 stakeholder meetings. During the past five years alone, ETC Institute has administered surveys in more than 700 cities and counties across the United States. ETC Institute has conducted research for more major U.S. cities and counties than any other firm.

	Currie Park Phase II - Architectural and Engineering Services	City of Miami Parks and Recreation Master Plan	City of Miami Commodore Trail Master Plan and Improvements	Village-Wide Tree Inventory and Management Plan/Welllington	City of Delray Beach City-Wide Tree Inventory and Urban Forest Management Plan	City of Lake Worth Tree Inventory and Management Plan
Cristobal Betancourt, PLA, AICP	■	■	■			
Brian Voelker, M.S., SPWS, C.A., CLI	■		■	■	■	■
Jason Sutton, PLA, C.A.			■			
Brittany Bourgault	■					
Jennifer Cook	■	■				
Charmaine Emanuels	■					
Sara Benbasat		■				



CMA Staff Name	Percent of Availability
Cristobal Betancourt, PLA, AICP	10%
Brian Voelker, M.S., SPWS, C.A., CLI	40%
Jason Sutton, PLA, C.A	20%
Brittany Bourgault	20%
Jennifer Cook	20%
Charmaine Emanuels, P.E.	10%
Sara Benbasat	20%

Cristobal A Betancourt, PLA, AICP
Vice President of Landscape Architecture/Planning

Education
Bachelor of Science, Landscape Architecture, Cornell University, 1995
Master of Science, Urban Design, Royal Danish Academy of Fine Arts, School of Architecture, 1996

Registration
Registered Landscape Architect, Florida, LA6666941, 2008

Professional Affiliations
American Planning Association
American Society of Landscape Architects
Florida Recreation and Park Association
National Recreation and Park Association
Urban Land Institute

Certifications
Council of Landscape Architectural Registration Board
American Institute of Certified Planners

Mr. Betancourt is CMA's Vice President of Landscape Architecture and Planning. He has experience providing planning and landscape architecture design solutions for public and private sector clients. His team provides a full range of services starting with due diligence and master planning culminating in detailed site design. He is well versed in the use of low-impact development techniques specifically applied to site planning, has knowledge of local municipal codes, and is proficient in Florida's plant palette, local environmental conditions, and site-specific microclimates used to prepare aesthetic and functioning landscape designs. Mr. Betancourt leads multi-discipline teams for parks and recreation facilities throughout Florida, providing design, permitting, and construction observation services for many types of improvements, including athletic fields; pedestrian, bicycle, and equestrian trails; site amenities; playgrounds; boating and aquatic facilities; themed wayfinding; amphitheaters; landscape; hardscape; and irrigation.

Project Experience

Currie Park Phase II - Architectural and Engineering Services. CMA is the prime consultant leading the redevelopment of Currie Park for the City of West Palm Beach. The project aims to enhance a public asset to provide a substantial public benefit increasing the health, welfare and economic vitality of the community. The 13.6 acre waterfront park currently consists of public open space including boat ramps with trailer parking, tennis courts, fishing pier, playground, a landmark memorial to commemorate the late Dr. Martin Luther King Jr., covered pavilions and restroom facilities. The Project is broken into two phases. CMA led the development Phase I which included Information Gathering, Public Engagement, and Visioning for the Project. In addition to Visioning, our team conducted a marina market analysis, developed a maintenance and operations plan, and identified public/private partnerships and other means of financing the construction and operation of Currie Park as part of Phase I services. The CMA team identified and assisted the City/CRA in applying for a $20.3 million Building Resiliency Grant offered through the Florida Department of Economic Opportunity. The project was awarded $16.74 million of the grant request. The Vision Plan was approved by the CRA Board and Commission on June 1, 2021.

City of Miami Parks and Recreation Master Plan. The City of Miami's Parks Master Plan will provide strategic and resilient recommendations for the provision of facilities, programs, services, maintenance and operations, park land acquisitions, and development. The updated plan will allow Miami Parks to satisfy accreditation requirements, align their future decisions in a strategic manner that will identify operational needs based on current assessments. The master plan will assist Miami Parks in a guiding direction to make necessary improvements in regards to how we manage facilities and operations, programming, staffing, administration, and management.

Brian Voelker, M.S., SPWS, C.A., CLI
Senior Environmental Scientist

Education
Bachelor of Science, Environmental Studies, State University of New York, 1996
Master of Science, Coastal Zone Management, Marine Biology, Nova Southeastern University, 2000

Registration
FAA Drone Remote Pilot, 4253470
SWS Professional Wetland Scientist, 1355, 2002
ISA Certified Arborist, FL-5378A, 2006
ISA Tree Risk Assessment Qualification, (TRAQ), 2014, 2014

Professional Affiliations
International Society of Arboriculture
Landscape Inspectors Association of Florida (LIAF)
South Florida Association of Environmental Professionals (SFAEP)
Florida Urban Forestry Council (FUFC) - Board of Directors)

Mr. Voelker is a senior scientist specializing in natural resource assessments and permitting, as well as certified arborist services. He provides numerous ecological services to clients, including the following: wetland delineation, function evaluation, mitigation design, monitoring, and permitting; upland habitat assessments; coastal habitat assessments and permitting; marine and estuarine habitat assessments and permitting; protected wildlife assessments and permitting; GPS data collection/mapping and GIS database development; NEPA document preparation and oversight; sediment and erosion control monitoring.

As an ISA Certified Arborist, Mr. Voelker provides numerous consulting arborist services to both public and private sector clients, including the following: GPS tree inventories and GIS tree database development; destroyed/damaged tree assessments; tree value estimates; tree grading; tree/utility conflict identification; hazard tree evaluations (risk assessment); analysis of tree canopy cover and ecological/monetary benefits; urban forest management plans; planting and maintenance bid packages, mangrove trimming oversight; tree removal permitting.

Project Experience
(The following projects represent Mr. Voelker's experience while with another firm)
City of Delray Beach City-Wide Tree Inventory and Urban Forest Management Plan. This project included a City-wide tree inventory of ±11,600 trees and the development of an Urban Forest Management Plan (UFMP). The UFMP provided an analysis of existing tree data and recommendations for tree management and future plantings to achieve canopy cover goals. The project also included presentations of UFMP findings to City staff and the City Commission.

Village-Wide Tree Inventory and Management Plan/Welllington. This project consisted of a three phase Village-wide inventory within streets and municipal properties (13,180 trees total). The tree inventory data and other sources were utilized to develop an Urban Forest Management Plan that outlined recommendations for management of the Village-owned trees and assisting the Village in achieving its canopy goals. The canopy coverage assessment included and analysis of tree benefits utilizing iTree.

Tree Inventory and Management Plan, City of Lake Worth, Palm Beach County, Florida. This project consisted of a City-wide GPS tree inventory of approximately 7,800 trees within the City's roadways and parks, a multi-year canopy coverage analysis, and the preparation of an urban forest management plan. Mr. Voelker managed the inventory and preparation of the urban forest management plan.

Jason T Sutton, PLA, CA
Principal Landscape Architect

Hire Date
08/31/2017
Years with other firms: 7
Education
Bachelor of Science, Landscape Architecture, University of Florida, 2007 , Minor Degree in Horticultural Science, 0

Registration
Registered Landscape Architect, Florida, LA6667189, 2014

Professional Affiliations
Florida Planning and Zoning Association (Past President)

Certifications
FDOT Specifications
ISA Certified Arborist

Civic Organizations
Seminole County Parks and Preservation Advisory Committee (SCPPAC)

Mr. Sutton is a Principal Landscape Architect for CMA's landscape architecture team. He is proficient in Florida's plant palette, local environmental conditions, and site-specific microclimates used to prepare aesthetic and functioning landscape designs. He also brings experience with environmental and wildlife monitoring adding significant field knowledge to our team. Mr. Sutton is well versed in the use of low-impact development techniques specifically applied to site planning, and has extensive experience with parks and recreation facilities throughout Florida for public and private sector clients domestically and internationally, providing design, permitting, and construction observation services for many types of improvements, including numerous transportation projects; municipal parks; streetscapes; VA National Cemeteries; athletic fields; pedestrian, bicycle, and equestrian trails; site amenities; playgrounds; boating and aquatic facilities; resort properties; themed wayfinding; amphitheaters; landscape; hardscape; and irrigation.

Project Experience

University Dr-NW 40th to Sawgrass Expressway. Chen Moore and Associates is providing professional landscape architecture services for this off-system project for FDOT D4 as a subconsultant to DRMP. The project lies wholly within the city limits of Coral Springs. The scope of the project includes the conversion of an existing 4 lane road section to 6 lanes. This section of University Drive has a significant amount of existing tree canopy and is lined with multiple businesses and residential neighborhoods that will be impacted by the widening. The design goals are to limit the impact to the existing tree canopy, incorporate a proposed linear park and meandering shared use paths into the design, and develop a cohesive landscape theme for the corridor. The services being provided by CMA include community input, tree inventory and disposition plans, tree mitigation permitting, landscape, hardscape, and irrigation design.

I-4 Ultimate Project. CMA is part of the design-build team working to complete the I-4 Ultimate project. Our experienced staff, working with the Landscape Architect of Record, conduct field reviews to observe layouts and make recommendations on adjustments for utilities, sign view zones, stormwater management facilities, and other infrastructure. The complexity of the project requires adaptations of the design, which often changes to respond to field conditions and local preferences. This effort is ongoing throughout the Orlando metropolitan area from the resort areas southwest of downtown, to the quiet rest area north of Altamonte Springs.

Miami Dade County PROS.CMA is proving master planning, construction documents, permitting, and construction administration services for five (5) nature themed playgrounds for Miami Dade County Parks, Recreation and Open Space (MDC PROS). The projects are distributed throughout the County and include Highland Oaks Park, Glenwood Park, Area 226, The Women's Park and Oak Grove Park.

Charmaine C Emanuels, P.E.
Associate Engineer

Education
Bachelor of Science, Civil Engineering, Florida International University, 2019

Registration
Professional Engineer, Florida, 96867

Ms. Emanuels serves as a Project Engineer for CMA's engineering team and has experience working on various aspects of civil engineering design, plan preparation, permitting efforts, and construction oversight while leading segments of the project design. Her experience includes utility coordination; performing modeling and simulation; site grading; pavement analysis; water distribution system; sanitary sewer collection system; lift station design; stormwater management system and drainage analysis; roadway design; maintenance of traffic and phasing; pavement marking; signage; and erosion control. She also prepares meeting agendas, meeting minutes, and estimates of probable cost including quantity takeoffs.

Project Experience

NPDES Program Management. As a component of the City Engineer services, Chen Moore and Associates (CMA) assists the City with administering the National Pollutant Discharge Elimination System (NPDES) Program through the FDEP, which will include the following annual tasks:

- Assist the City with the management and/or implementation of current NPDES Program
- Review of existing NPDES documentation and existing NPDES ordinances
- Recommend implementation of additional procedures for future program years
- Suggest changes to the current NPDES program, which may include but are not limited to: institute permit review fees for all projects, including projects less than one acre; revise the City Ordinance that governs the NPDES program to allow for these fees and additional changes; and review contractor SWPPP logs on a monthly basis to ensure the required inspections are completed and the proper Best Management Practices (BMPs) are implemented.
- Prepare NPDES Annual Report for submittal to Broward County Respond to Requests for Additional Information (RAIs) from FDEP and Broward County
- Assemble various compliance documentation required by FDEP and Broward County
- Provide inspections of large construction sites (greater than one acre) after rain events and/or on a monthly basis. CMA conducts 30 such inspections during each fiscal year.
- Research all existing stormwater permits with SFWMD and Broward County Environmental Protection within the City limits.
  Identify all existing stormwater permits which include water quality treatment elements, such as exfiltration trench, dry retention areas, wet ponds, and swale areas, located within City property and City right-of-way.
- Incorporate all permitted water quality treatment elements, such as exfiltration trench, dry retention areas, wet ponds, and swale areas,

Brittany Bourgault
Landscape Designer

Hire Date
10/16/2019
Years with other firms: 12
Education
Bachelor of Science, Landscape Architecture, University of Florida, 2009
Associate of Arts, General Studies, Santa Fe Community College, 2005

Professional Affiliations
American Society of Landscape Architects

Ms. Bourgault is a landscape architect for CMA's landscape architecture team. Her professional experience includes working closely with different municipalities throughout Florida, conducting code research and analysis while implementing code compliant site plan, masterplans, and landscape designs. She is proficient in Florida's plant palette, local environmental conditions, and site-specific microclimates used to prepare aesthetic and functioning landscape designs. She is also experienced with creative design solutions/Cure Plans for landowners working with FDOT through right-of-way takings/eminent domain proceedings. Ms. Bourgault is well versed in the use of low-impact development techniques specifically applied to site planning, and has extensive experience with parks and recreation facilities throughout Florida for public and private sector clients, providing design, permitting, and construction observation services for many types of improvements, including commercial developments; site amenities; streetscapes; athletic fields; pedestrian, bicycle, and equestrian trails; site amenities; playgrounds; boating and aquatic facilities; themed wayfinding; amphitheaters; MUPDs and PUDs; landscape; hardscape; and irrigation.

Project Experience

Currie Park Phase II - Architectural and Engineering Services. CMA is the prime consultant leading the redevelopment of Currie Park for the City of West Palm Beach. The project aims to enhance a public asset to provide a substantial public benefit increasing the health, welfare and economic vitality of the community. The 13.6 acre waterfront park currently consists of public open space including boat ramps with trailer parking, tennis courts, fishing pier, playground, a landmark memorial to commemorate the late Dr. Martin Luther King Jr., covered pavilions and restroom facilities. The Project is broken into two phases. CMA led the development Phase I which included Information Gathering, Public Engagement, and Visioning for the Project. In addition to Visioning, our team conducted a marina market analysis, developed a maintenance and operations plan, and identified public/private partnerships and other means of financing the construction and operation of Currie Park as part of Phase I services.

City of Miami Commodore Trail Master Plan and Improvements. CMA is preparing a framework and design guidelines plan for the Commodore Trail corridor. This framework document is necessary to develop the Commodore Trail design identified within the City of Miami Parks and Open Space Master Plan and Miami-Dade County Transportation Planning Organization Bicycle Project Feasibility Evaluation. The project assignment is to work with city staff, community representatives and stakeholders to develop a master plan creating a cohesive trail along the corridor consisting of a protected bikeway, pedestrian walkway, street trees, landscaping, street furnishings, lighting, wayfinding, artistic features, and other corridor enhancements.

Jennifer Eve Cook
Associate Planner

Hire Date
04/25/2017
Years with other firms: 0
Education
Bachelor of Arts, Finance, FAU, 2010

Professional Affiliations
American Planning Association
Florida Recreation and Park Association

Certifications
Landscape and Horticulture Specialist
Permaculture Design and Master Planning

Jennifer Cook is an associate planner with CMA's landscape architecture team. She provides planning, design and production support to the team responsible for producing plan and section renderings and graphics, and realistic 3D renderings and fly-through videos. Ms. Cook is proficient in Florida's plant palette, local environmental conditions, and site-specific microclimates used to prepare aesthetic and functioning landscape designs. Ms. Cook is also a horticulture specialist, certified in permaculture design with an emphasis in master planning agricultural facilities. She is well versed in the use of low-impact development techniques specifically applied to site planning, and has experience with parks and recreation facilities throughout Florida for public and private sector clients, providing design, permitting, and construction observation services for many types of improvements.

Project Experience

Fort Myers Parks and Recreation Master Plan - RFQ 0001-23 - PP&D No. 2312. Recognizing that public spaces are the building block of healthy communities, CMA is honored to be part of the professional team preparing the City of Ft. Myers' Parks and Recreation Master Plan. The CMA Team is currently preparing the needs assessment study by conducting a detailed inspection of each park to identify deficiencies. CMA will also conduct a public engagement process to listen to residents and gather their input. Based on the needs assessment and the community feedback, CMA will prepare capital improvement initiatives to improve and enhance the City of Ft. Myers Parks and Recreation Program.

City of Miami Parks and Recreation Master Plan - RFQ 16-17-063 - PO 1808121/5. The City of Miami's Parks Master Plan will provide strategic and resilient recommendations for the provision of facilities, programs, services, maintenance and operations, park land acquisitions, and development. The updated plan will allow Miami Parks to satisfy accreditation requirements, align their future decisions in a strategic manner that will identify operational needs based on current assessments. The master plan will assist Miami Parks in a guiding direction to make necessary improvements in regards to how we manage facilities and operations, programming, staffing, administration, and management.

The City is home to over 147 beautiful parks, totaling more than 1,400 acres, 12 swimming pool facilities, 43 community centers, 4 gymnasiums, the Sandra DeLucca Developmental Center, the Little Haiti Cultural Center and Caribbean Marketplace, a Japanese Garden, Grapeland Water Park, and Melreese Golf Course. CMA is serving as the Prime Consultant for this Master Plan. The work to be performed under this contract would consist of professional services for the development of a parks and recreation master plan that will meet the Commission for Accreditation of Parks and Recreation Agencies (CAPRA) requirements.

Sara Benbasat
Associate Planner

Hire Date
08/16/2021
Years with other firms: 0
Education
Bachelor of Science,
Bachelor of Urban Design,
Florida Atlantic University, 0

Professional Affiliations
Palm Beach Planning Congress

Sara Benbasat has experience with site plan development review in municipal planning. Ms. Benbasat also has contributed to staff reports, project proposals, conceptual renderings, and company marketing.

Project Experience

City of Miami Parks and Recreation Master Plan. The City of Miami's Parks Master Plan will provide strategic and resilient recommendations for the provision of facilities, programs, services, maintenance and operations, park land acquisitions, and development. The updated plan will allow Miami Parks to satisfy accreditation requirements, align their future decisions in a strategic manner that will identify operational needs based on current assessments. The master plan will assist Miami Parks in a guiding direction to make necessary improvements in regards to how we manage facilities and operations, programming, staffing, administration, and management.

Manalapan Town Planning. The CMA planning team has been providing planning and zoning services to the Town of Manalapan since 2015. The team is responsible for site plan reviews, comprehensive plan updates and zoning code amendments.
The CMA planning team also prepared the Community Rating System report for the Town of Manalapan including the following information :

- Public Information
- Mapping and Regulations
- Flood Damage Reduction
- Warning and Response

In 2022, the CMA Team conducted a Comprehensive Plan Update to the Coastal Management element. The subject project included amendments to the policies.

Cooper City Landscape Master Plan - PO 2022-8134. Preparation of Landscape Master Plan for the public spaces of the City of Cooper City, FL - CMA shall work with the City to identify the public spaces and ROWs and work with City, stakeholders and engage with the public to receive input on the desired aesthetic for the community. CMA shall prepare a master plan for the City to be used as a design guidelines manual for how to move forward to create a unified and identifiable aesthetic to be applied throughout the City.

Preparation of Evaluation and Appraisal Report and Comprehensive Plan Amendments - PO 2023-00000296 - RFP No. 23-003. CMA is assisting the City of Dania Beach to update the Comprehensive Plan based on the Evaluation and Appraisal Review (EAR) according to Chapter 163.3191, Florida Statutes (F.S.). The proposed scope includes a detail review of the elements including Policy (Goals, Objectives and Policies) and Data and Analysis ensuring compliance with current Florida Statutes (F.S.); and, updates to reflect changes in the City's trends, vision and demographics.

Ryan Murray

Assistant Director of Community Research & Project Manager
ETC Institute
725 W. Frontier Lane, Olathe, KS 66061
Ryan.Murray@etcinstittue.com

EDUCATION

B.S., Public Administration, The University of Kansas

SUMMARY OF EXPERIENCE

Mr. Murray has over 15 years of experience in survey administration, development, supervision, and research analysis. Throughout his tenure at ETC Institute Mr. Murray has had the pleasure of working on survey projects that cover a wide variety of topics, including parks and recreation, community planning, customer satisfaction, transportation, employee, library, comprehensive planning, parks and recreation master plans, water and utility, and business development. His current role includes quantitative and qualitative research, report writing, benchmarking research, survey development, and statistical analysis. Mr. Murray has also held a supervisory role within the firm. In his previous role he planned, coordinated and supervised the administration of large scale origin-destination transportation studies on multiple projects across the country. Over the past two years, Mr. Murray has worked as project manager on projects for over 150 state, county, local, and private sector clients. Below are some examples of the clients Mr. Murray has worked for.

PROFESSIONAL EXPERIENCE

- Aberdeen, South Dakota
- Auburn Alabama
- Augusta, Georgia
- Austin, Texas
- Blue Springs, Missouri
- Cape Coral, Florida
- Cary, Illinois
- Chapel Hill, North Carolina
- Dallas, Texas
- Denver Regional Council of Governments, Colorado
- Des Moines Area Regional Transit Authority, Iowa
- Des Moines, Iowa
- Des Plaines, Illinois
- Doral, Florida
- Durham, North Carolina Police Department
- EMBARK, Oklahoma
- Fauquier County Parks, Virginia
- Flower Mound, Texas
- Genessee County, Illinois
- Geneva, Illinois
- Grand Prairie, Texas
- Houston Metro, Texas
- Johnson County, Kansas
- Johnson County Wastewater
- KC Water
- Kennesaw, Georgia
- Kettering, Ohio
- Las Vegas, Nevada
- Maricopa Association of Governments, Arizona
- Miami Dade County, Florida
- NTMWD
- Oklahoma City, Oklahoma
- Olathe, Kansas
- Palm Beach, Florida
- Pearland, Texas
- Rowan County, North Carolina
- Shoreline, Washington
- St. Joseph, Missouri
- St. Louis, Missouri
- Tacoma, Washington
- Tucson, Arizona
- Valparaiso, Indiana
- Washougal, Washington
- Wauwatosa, Wisconsin
- Webster Groves Library, Missouri

Jason Morado

Director of Community Research & Senior Project Manager
ETC Institute
725 W. Frontier Lane, Olathe, KS 66061
Jason.Morado@etcinstittue.com

EDUCATION

M.B.A., Webster University, 2009
B.S. in Business Administration – Marketing, Avila University 2000

SUMMARY OF EXPERIENCE

Mr. Morado has over 19 years of experience in the design, administration, and analysis of community market research. He has served as the project manager on community survey research projects for over 600 local governmental organizations throughout the U.S. Mr. Morado is experienced in all phases of project management of market research studies, including survey design, developing sampling plans, quantitative and qualitative analysis, interpretation of results and presentation of findings. His areas of emphasis include citizen satisfaction surveys, parks and recreation needs assessment surveys, community planning surveys, business surveys, and transportation studies. He has also led the coordination and facilitation of focus groups and stakeholder interviews for a wide range of topics.

RELEVANT PROJECT EXPERIENCE

Parks and Recreation Surveys
Mr. Morado has served as a project manager for over 250 parks and recreation surveys for local governmental organizations. Some of these organizations include:

- Albemarle County, VA
- Atlanta, GA
- Arlington County, VA
- Boone County, KY
- Brownsburg, IN
- Broward County, FL
- Carmel-Clay, IN
- Casa Grande, AZ
- Charleston, SC
- Chatham County, NC
- Chesterfield, MO
- Cincinnati, OH
- Corpus Christi, TX
- Culpepper County, VA
- Dania Beach, FL
- Davie County, NC
- Denver, CO
- Downers Grove Park District, IL
- Durango, CO
- Eau Claire, WI
- El Paso County, TX
- Elmhurst Park District, IL
- Fauquier County, VA
- Fayetteville-Cumberland County, NC
- Geneseo Park District, IL
- Glasgow, KY
- Gwinnett County, GA
- Hamilton County, OH
- Harnett County, NC
- Hoffman Estates Park District, IL
- Hunters Creek, FL
- Huron-Clinton Metroparks, OH
- Idaho Falls, ID
- Kent, WA
- Maryland Heights, MO
- Mecklenburg County, NC
- Merriam, KS
- Miami, FL
- Milton, GA
- Milwaukee County, WI
- Mobile, AL
- Montpelier, VT
- Montgomery County, MD
- Morrisville, NC
- Oakland County, MI
- Ozark, MO
- Pleasant Hill, CA
- Prince George County, MD

6. Schedule


OPEN PLAY
±2.70 AC
ON-SITE STORMWATER
±5.00 AC
DRY RETENTION
PLAYGROUND
COMMUNITY CENTER
OPEN PLAY
±1.00 AC
DRY RETENTION
OFF-SITE STORMWATER

SCHEDULE

The following is a proposed work schedule for the major tasks. Timeframes for sub-tasks will vary depending upon City staff/public feedback and can be developed after initiation of the project:

RFP Task	Description	Estimated Timeframe
Task 1	Project Management	Ongoing throughout 4-month project duration
Task 2	Analysis of Current Status, Challenges and Opportunities	1 month
Task 3	Stakeholder Participation and Outreach	Ongoing throughout 4-month project duration
Task 4	Urban Forest Plan Development	2 to 4 months

7. Pricing of Services



PRICING OF SERVICES

PRICE PROPOSAL FORM

PROPONENT understands and agrees that the Contract Price is the lump sum to furnish and install all of the Work complete in place. Vendor's price will not be adjusted unless the CITY changes the scope of the Project after the Contract Date.

As such, the Vendor shall furnish all labor, materials, equipment, tools, superintendence, and services necessary to provide a complete, in place Project for the Proposed Price of:

LUMP SUM PRICE: $ $87.660

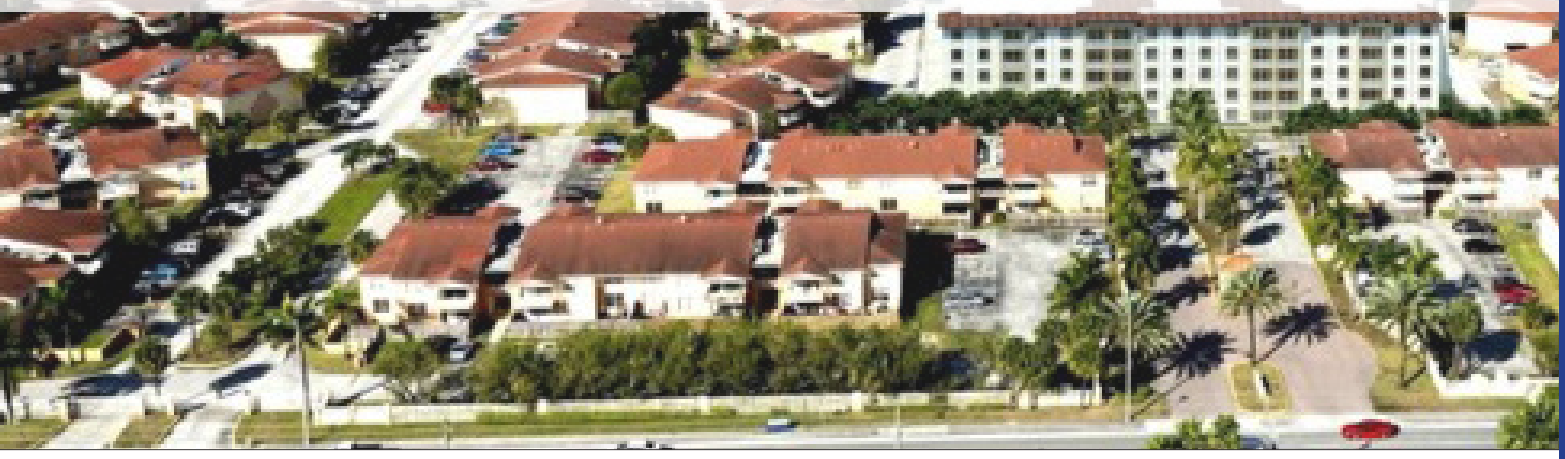
SUBMITTED THIS 27th DAY OF November 2023.

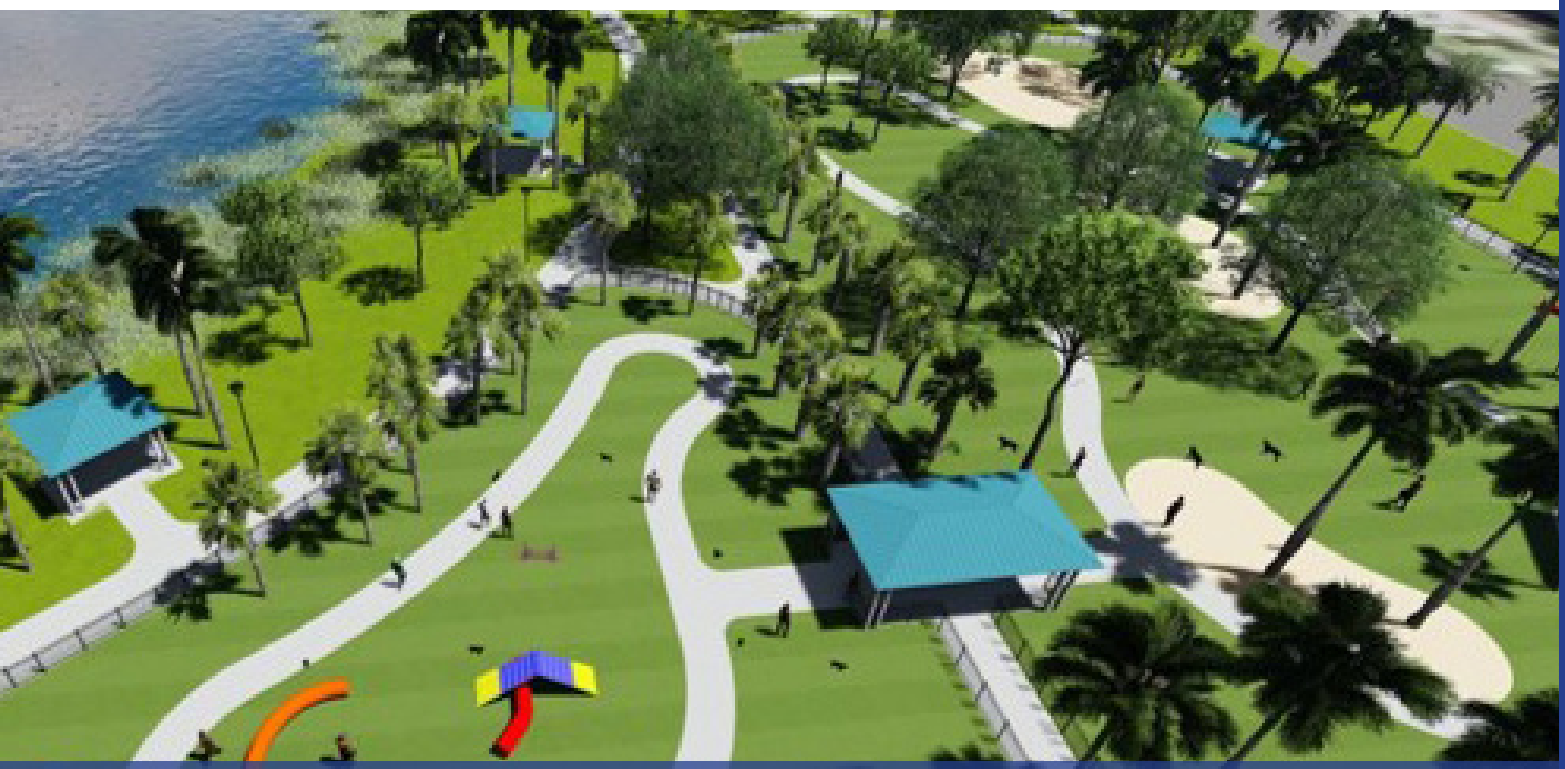
BID SUBMITTED BY:

Chen Moore and Associates Company	954 559 6362 Telephone Number
Brian Voelker Name of Person Authorized to Submit Bid	N/A Fax Number
Brian Voelker Signature	bvoelker@chenmoore.com Email Address
Senior Environmental Scientist Title	

Pricing of Services

8. References





TAB 8

REFERENCES

Currie Park Phase II - Architectural and Engineering Services

Estimated Completion Date

2023

Client

City of West Palm Beach
Christopher Roog
401 Clematis Street, 4th Floor
West Palm Beach, FL 33402, FL 33062
(561) 822-1416



CMA is the prime consultant leading the redevelopment of Currie Park for the City of West Palm Beach. The project aims to enhance a public asset to provide a substantial public benefit increasing the health, welfare and economic vitality of the community. The 13.6 acre waterfront park currently consists of public open space including boat ramps with trailer parking, tennis courts, fishing pier, playground, a landmark memorial to commemorate the late Dr. Martin Luther King Jr., covered pavilions and restroom facilities. The Project is broken into two phases. CMA led the development Phase I which included Information Gathering, Public Engagement, and Visioning for the Project. In addition to Visioning, our team conducted a marina market analysis, developed a maintenance and operations plan, and identified public/private partnerships and other means of financing the construction and operation of Currie Park as part of Phase I services. The CMA team identified and assisted the City/CRA in applying for a $20.3 million Building Resiliency Grant offered through the Florida Department of Economic Opportunity. The project was awarded $16.74 million of the grant request. The Vision Plan was approved by the CRA Board and Commission on June 1, 2021.

CMA is currently planning Phase II activities which will include Design, Construction Documentation, Permitting, and Construction Administration. This scope of services is predicated on the approved Currie Park Master Plan developed by the CMA team and approved by the Community Redevelopment Agency Board and City Commission. The Design Program maintains the existing MLK Memorial and Boat Ramp facilities and adds new facilities such as Fitness Area and Sports Courts, waterfront promenade, living shoreline, native gardens, multipurpose lawn for cultural and special events, café/kiosk, restrooms, small watercraft launching area, and destination playground.

City of Miami Parks and Recreation Master Plan

Estimated Completion Date

2023

Client

City of Miami
Chris Evans
444 SW 2nd Avenue, 8th Floor
Miami, FL 33130
(305) 416-1300

The City of Miami's Parks Master Plan will provide strategic and resilient recommendations for the provision of facilities, programs, services, maintenance and operations, park land acquisitions, and development. The updated plan will allow Miami Parks to satisfy accreditation requirements, align their future decisions in a strategic manner that will identify operational needs based on current assessments. The master plan will assist Miami Parks in a guiding direction to make necessary improvements in regards to how we manage facilities and operations, programming, staffing, administration, and management.

The City is home to over 147 beautiful parks, totaling more than 1,400 acres, 12 swimming pool facilities, 43 community centers, 4 gymnasiums, the Sandra DeLucca Developmental Center, the Little Haiti Cultural Center and Caribbean Marketplace, a Japanese Garden, Grapeland Water Park, and Melreese Golf Course. CMA is serving as the Prime Consultant for this Master Plan. The work to be performed under this contract would consist of professional services for the development of a parks and recreation master plan that will meet the Commission for Accreditation of Parks and Recreation Agencies (CAPRA) requirements.



City of Miami Commodore Trail Master Plan and Improvements

Estimated Completion Date

2023

Client

City of Miami
Lorraine Rosado-Pietri
444 SW 2nd Avenue, 8th Floor
Miami, FL 33130
(305) 416-1300

CMA is preparing a framework and design guidelines plan for the Commodore Trail corridor. This framework document is necessary to develop the Commodore Trail design identified within the City of Miami Parks and Open Space Master Plan and Miami-Dade County Transportation Planning Organization Bicycle Project Feasibility Evaluation. The project assignment is to work with city staff, community representatives and stakeholders to develop a master plan creating a cohesive trail along the corridor consisting of a protected bikeway, pedestrian walkway, street trees, landscaping, street furnishings, lighting, wayfinding, artistic features, and other corridor enhancements. The framework and design plan will encompass 3.61 miles of the trail's 5.03 miles of publicly owned right-of-way beginning in the south at Cocoplum Circle and terminating at South Miami Avenue.



Village-Wide Tree Inventory and Management Plan/Welllington

Estimated Completion Date

2021

Client

Keith Jackson

1280 North Congress Avenue, Suite 101

West Palm Beach, FL 33409

(561) 791 4003

This project consisted of a three phase Village-wide inventory within streets and municipal properties (13,180 trees total). The tree inventory data and other sources were utilized to develop an Urban Forest Management Plan that outlined recommendations for management of the Village-owned trees and assisting the Village in achieving its canopy goals. The canopy coverage assessment included and analysis of tree benefits utilizing iTree. These services were performed for the Village as a subconsultant to Engenuity Group.

Please note that the work for this project was performed by Brian Voelker of CMA while working at a previous firm (E Sciences, Inc.).

City of Delray Beach City-Wide Tree Inventory and Urban Forest Management Plan

Estimated Completion Date

2022

Client

City of Delray Beach, Kent Edwards, Sustainability Officer

434 South Swinton Avenue

Delray Beach, FL 33444

(561) 243-7349

This project included a City-wide tree inventory of ±11,600 trees and the development of an Urban Forest Management Plan (UFMP). The UFMP provided an analysis of existing tree data and recommendations for tree management and future plantings to achieve canopy cover goals. The project also included presentations of UFMP findings to City staff and the City Commission.

Tree Inventory and Management Plan, City of Lake Worth Beach, Palm Beach County

Estimated Completion Date

2014

Client

David McGrew
1900 2nd Avenue North
Lake Worth Beach, FL 33461
(561) 586-7433

This project consisted of a City-wide GPS tree inventory of approximately 7,800 trees within the City's roadways and parks, a multi-year canopy coverage analysis, and the preparation of an urban forest management plan. Mr. Voelker managed the inventory and preparation of the urban forest management plan.

Please note that the work for this project was performed by Brian Voelker of CMA while working at a previous firm (E Sciences, Inc.).



9. Additional Forms



TAB 9

ADDITIONAL FORMS

PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. **Legal Name and Address:**

   Name: Chen Moore and Associates

   Address: 3150 SW 38th Ave, Suite 950

   City, State, Zip: Miami, FL, 33146 **Phone/Fax:** P: (786) 497-1500; F: (786) 497-2300

2. **Check One: Corporation (X) Partnership ( ) Individual [ ]**

3. **If Corporation, state:**
   Date of Incorporation: 11/7/1986 **State in which Incorporated:** Florida

4. **If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:**
   _____

5. **Name and Title of Principal Officers** **Date Elected:**

   Peter Moore, P.E., F.ASCE, ENV SP, LEED AP President/Owner — 7/1/2002

   Jose L. Acosta, P.E., F.ASCE, Vice President/Owner — 3/25/2013

   Jason McClair, P.E., CFM, LEED AP, Vice President/ Treasurer/Owner — 7/1/2002

   Safiya Brea, P.E., LEED AP, Secretary/Owner — 1/1/2011

6. **The length of time in business:** 37 years **years**

7. **The length of time (continuous) in business as a service organization in Florida:**
   37 years **years**

8. **Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.** Please see section 8.

9. **A copy of County and/or Municipal Occupational License(s)**

Note: Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractor, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

6597265

RECEIPT NO.
RENEWAL
6868062

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
MOORE PETER MICHAEL PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
MOORE PETER MICHAEL PE
C/O CHEN MOORE AND
ASSOCIATES INC

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE58709

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles – Miami–Dade Code Sec 8a–276.

For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

7188143

RECEIPT NO.
RENEWAL
7469215

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
MENDEZ GREGORY A PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
MENDEZ GREGORY A PE
CHEN MOORE & ASSOCIATES INC

1

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE64718

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

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For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

7188144

RECEIPT NO.
RENEWAL
7469216

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
KAIMRAJH PATRICK DAVENDRA
PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
KAIMRAJH PATRICK DAVENDRA PE
CHEN MOORE & ASSOCIATES INC

1

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE78535

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

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MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

4574266

RECEIPT NO.
RENEWAL
4775459

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
CHEN MOORE AND
ASSOCIATES INC
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
CHEN MOORE AND ASSOCIATES
INC
C/O MOORE PETER M
Employee(s) 12

SEC. TYPE OF BUSINESS
212 P.A./CORP/PARTNERSHI
P/FIRM

EB4593

PAYMENT RECEIVED BY TAX COLLECTOR
54.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

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For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

7177168

RECEIPT NO.
RENEWAL
7457162

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
ACOSTA JOSE LUIS PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
ACOSTA JOSE LUIS PE
C/O CHEN MOORE & ASSOCIATES

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE63827

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles – Miami–Dade Code Sec 8a–276.

For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

State of Florida
Department of State

I certify from the records of this office that CHEN MOORE AND ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on November 7, 1986.

The document number of this corporation is J41454.

I further certify that said corporation has paid all fees due this office through December 31, 2023, that its most recent annual report/uniform business report was filed on August 23, 2023, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-third day of August, 2023

GREAT SEAL OF THE STATE OF FLORIDA · IN GOD WE TRUST

Secretary of State

Tracking Number: 3349928913CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature _____

Printed Name Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

CITY OF OPA-LOCKA

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Peter Moore, P.E., F.ASCE, ENV SP, LEED AP the
(Name)

President of Chen Moore and Associates
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

November 28, 2023
Date

Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA – COUNTY OF MIAMI DADE

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP being first duly sworn, deposes and says that:

(1) He/She/They is/are the President (Owner, Partner, Officer, Representative or Agent) of Chen Moore and Associates the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Witness

Witness

By: Signature

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP President

Print Name and Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

Title: President

Sworn and subscribed before this

28 day of November, 20 23

Notary Public, State of Florida

Stephanie Williams

(Printed Name)

My commission expires: 6/7/2026

NOTARY PUBLIC STATE OF FLORIDA

STEPHANIE M. WILLIAMS
Commission # HH 238202
Expires June 7, 2026

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) **All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and**

b) **All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and**

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: Chen Moore and Associates

Authorized Signature: _____

Print Name: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

Title: President

Date: November 28, 2023

Official Website of the Department of Homeland Security

Client Enrollment

Review & Submit

- COMPANY INFORMATION
- EMPLOYER CATEGORY
- HIRING SITES
- CONTACTS
- REVIEW & SUBMIT

Company Information

Company Name
Chen Moore & Associates, Inc

Company ID
1372147

Doing Business As
Chen Moore & Associates, Inc

DUNS Number

Physical Address
500 West Cypress Creek
Suite 630
FORT LAUDERDALE, FL 33309

Mailing Address
500 West Cypress Creek
Suite 630
FORT LAUDERDALE, FL 33309

Employer Identification Number
59-2739866

County
Broward

chen moore and associates

Corporate Office

Fort Lauderdale
500 West Cypress Creek Road, Suite 630
Fort Lauderdale, FL 33309
Telephone: +1 (954) 730-0707

Regional Offices

West Palm Beach
500 Australian Ave. South, Suite 850
West Palm Beach, FL 33401
Telephone: +1 (561) 746-6900

Orlando (Maitland)
341 North Maitland Ave., Suite 346
Maitland, FL 32751
Telephone: (407) 536-7970

Miami
3150 SW 38th Avenue, Suite 950
Miami, FL 33146
Telephone: +1 (786) 497-1500

Jacksonville
3970 Hendricks Avenue
Jacksonville, FL 32207
Telephone: +1 (904) 398-8636

Additional Offices

Port St. Lucie
1860 SW Fountainview Boulevard, Suite 100
Port St. Lucie, FL 34986
Telephone: +1 (772) 252-5038

Jupiter
1851 W Indiantown Road, Suite 100
Jupiter, FL 33458
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Gainesville
2233 Northwest 41st Street, Suite 400
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3001 North Rocky Point Drive East, Suite 200
Tampa, FL 33607
Telephone: +1 (813) 345-5965

Sarasota
2520 North Tamiami Trail, Suite 15
Nokomis, FL 34275
Telephone: +1 (941) 529-1907

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 01/05/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Wendy Tyree	
LassiterWare LLC 1300 N. Westshore Blvd. Suite 110 Tampa FL 33607	PHONE (A/C, No, Ext): (800) 845-8437	FAX (A/C, No): (888) 883-8680
	E-MAIL ADDRESS: wendyt@lassiterware.com	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Chen Moore & Associates, Inc. d/b/a CMS 500 W. Cypress Creek Road Suite 630 Fort Lauderdale FL 33309	INSURER A : Crum & Forster Specialty Insurance Co	44520
	INSURER B : Travelers Cas Ins Co of Amer	19046
	INSURER C : Travelers Casualty & Surety Co	19038
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 23-24 Cert **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR [X] ContractorsPollution Liability [ ] GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:			EPK142287	01/01/2023	01/01/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 1,000,000 $ 300,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY			BA2W1500872247G	12/16/2022	12/16/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) PIP-Basic	$ 1,000,000 $ $ $ $ 10,000
A	[ ] UMBRELLA LIAB [X] OCCUR [X] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			EFX121958	01/01/2023	01/01/2024	EACH OCCURRENCE AGGREGATE 	$ 5,000,000 $ 5,000,000 $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		UB2W148891	12/16/2022	12/16/2023	[X] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
A	Professional Liability (Claims-Made) Limits included with General Liability			EPK142287	01/01/2023	01/01/2024	Each Claim Aggregate	$1,000,000 $2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

~Evidence of Insurance c/o Chen Moore and Associates, Inc.
500 W. Cypress Creek Road
Suite 630
Fort Lauderdale FL 33309

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Patricia Kane Sobnosky

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AGENCY CUSTOMER ID: _____

LOC #: _____

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
LassiterWare LLC	Chen Moore & Associates, Inc.
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance: Notes

*Excess Liability extends over the underlying General Liability, Contractors Pollution Liability, Automobile Liability, Professional Liability and Workers' Compensation per the terms and conditions of the policies.

All supporting endorsement(s) and policy form(s) attached, if any, comprise the Certificate of Liability Insurance in its entirety. Please review these endorsement(s) and policy form(s) as certain coverage provided by them may only apply when a written contract or agreement between the parties requires such coverage be provided.

The attached page(s) noting additional terms, conditions, coverage and/or comments applies.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
CONTRACTORS POLLUTION LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) or Organization(s)
Blanket when specifically required in a written contract with the named insured.

SECTION III – WHO IS AN INSURED within the Common Provisions is amended to include as an additional insured the person(s) or organization(s) indicated in the Schedule shown above, but only with respect to liability caused, in whole or in part, by "your work" for that insured which is performed by you or by those acting on your behalf.

ALL OTHER TERMS AND CONDITIONS OF THE POLICY REMAIN UNCHANGED.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Additional Person(s) or Organization(s):	Location And Description Of Completed Operations
Blanket when specifically required in a written contract with the named insured.	Blanket when specifically required in a written contract with the named insured.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section III – Who Is An Insured within the Common Provisions is amended to include as an insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NON-CONTRIBUTORY ADDITIONAL INSURED WITH WAIVER OF SUBROGATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
CONTRACTORS POLLUTION LIABILITY COVERAGE PART
ERRORS AND OMISSIONS LIABILITY COVERAGE PART
THIRD PARTY POLLUTION LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) or Organization(s)
Blanket when specifically required in a written contract with the named insured.

A. **SECTION III – WHO IS AN INSURED** within the Common Provisions is amended to include as an additional insured the person(s) or organization(s) indicated in the Schedule shown above, but solely with respect to “claims” caused in whole or in part, by “your work” for that person or organization performed by you, or by those acting on your behalf.

   This insurance shall be primary and non-contributory, but only in the event of a named insured’s sole negligence.

B. We waive any right of recovery we may have against the person(s) or organization(s) indicated in the Schedule shown above because of payments we make for “damages” arising out of “your work” performed under a designated project or contract with that person(s) or organization(s).

C. This Endorsement does not reinstate or increase the Limits of Insurance applicable to any “claim” to which the coverage afforded by this Endorsement applies.

ALL OTHER TERMS AND CONDITIONS OF THE POLICY REMAIN UNCHANGED.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BUSINESS AUTO EXTENSION ENDORSEMENT – FLORIDA

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

GENERAL DESCRIPTION OF COVERAGE – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to the Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Limitations and exclusions may apply to these coverages. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

A. BROAD FORM NAMED INSURED

B. BLANKET ADDITIONAL INSURED

C. EMPLOYEE HIRED AUTO

D. EMPLOYEES AS INSURED

E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS

F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS

G. WAIVER OF DEDUCTIBLE – GLASS

H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT

I. PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT

J. PERSONAL PROPERTY

K. AIRBAGS

L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS

M. BLANKET WAIVER OF SUBROGATION

N. UNINTENTIONAL ERRORS OR OMISSIONS

PROVISIONS

A. BROAD FORM NAMED INSURED

The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any organization you newly acquire or form during the policy period over which you maintain 50% or more ownership interest and that is not separately insured for Business Auto Coverage. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier.

B. BLANKET ADDITIONAL INSURED

The following is added to Paragraph **c.** in **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any person or organization who is required under a written contract or agreement between you and that person or organization, that is signed and executed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, to be named as an additional insured is an "insured" for Covered Autos Liability Coverage, but only for damages to which this insurance applies and only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Section **II.**

C. EMPLOYEE HIRED AUTO

1. The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in an "employee's" name, with your permission, while performing duties related to the conduct of your business.

2. The following replaces Paragraph **b.** in **B.5.**, **Other Insurance**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

b. For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos" you own:

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(1) Any covered "auto" you lease, hire, rent or borrow; and

(2) Any covered "auto" hired or rented by your "employee" under a contract in an "employee's" name, with your permission, while performing duties related to the conduct of your business.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

D. EMPLOYEES AS INSURED

The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS

1. The following replaces Paragraph **A.2.a.(2)**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

(2) Up to $3,000 for cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" we cover. We do not have to furnish these bonds.

2. The following replaces Paragraph **A.2.a.(4)**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

(4) All reasonable expenses incurred by the "insured" at our request, including actual loss of earnings up to $500 a day because of time off from work.

F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS

The following replaces Subparagraph **(5)** in Paragraph **B.7.**, **Policy Period, Coverage Territory**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

(5) Anywhere in the world, except any country or jurisdiction while any trade sanction, embargo, or similar regulation imposed by the United States of America applies to and prohibits the transaction of business with or within such country or jurisdiction, for Covered Autos Liability Coverage for any covered "auto" that you lease, hire, rent or borrow without a driver for a period of 30 days or less and that is not an "auto" you lease, hire, rent or borrow from any of your "employees", partners (if you are a partnership), members (if you are a limited liability company) or members of their households.

(a) With respect to any claim made or "suit" brought outside the United States of America, the territories and possessions of the United States of America, Puerto Rico and Canada:

(i) You must arrange to defend the "insured" against, and investigate or settle any such claim or "suit" and keep us advised of all proceedings and actions.

(ii) Neither you nor any other involved "insured" will make any settlement without our consent.

(iii) We may, at our discretion, participate in defending the "insured" against, or in the settlement of, any claim or "suit".

(iv) We will reimburse the "insured" for sums that the "insured" legally must pay as damages because of "bodily injury" or "property damage" to which this insurance applies, that the "insured" pays with our consent, but only up to the limit described in Paragraph **C.**, Limits Of Insurance, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**.

(v) We will reimburse the "insured" for the reasonable expenses incurred with our consent for your investigation of such claims and your defense of the "insured" against any such "suit", but only up to and included within the limit described in Paragraph **C.**, Limits Of Insurance, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**, and not in addition to such limit. Our duty to make such payments ends when we have used up the applicable limit of insurance in payments for damages, settlements or defense expenses.

(b) This insurance is excess over any valid and collectible other insurance available to the "insured" whether primary, excess contingent or on any other basis.

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(c) This insurance is not a substitute for required or compulsory insurance in any country outside the United States, its territories and possessions, Puerto Rico and Canada.

You agree to maintain all required or compulsory insurance in any such country up to the minimum limits required by local law. Your failure to comply with compulsory insurance requirements will not invalidate the coverage afforded by this policy, but we will only be liable to the same extent we would have been liable had you complied with the compulsory insurance requirements.

(d) It is understood that we are not an admitted or authorized insurer outside the United States of America, its territories and possessions, Puerto Rico and Canada. We assume no responsibility for the furnishing of certificates of insurance, or for compliance in any way with the laws of other countries relating to insurance.

G. WAIVER OF DEDUCTIBLE – GLASS

The following is added to Paragraph **D.**, **Deductible**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

No deductible applies under Specified Causes of Loss or Comprehensive coverage for "loss" to glass used in the windshield.

H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT

The following replaces the last sentence of Paragraph **A.4.b.**, **Loss Of Use Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

However, the most we will pay for any expenses for loss of use is $65 per day, to a maximum of $750 for any one "accident".

I. PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT

The following replaces the first sentence in Paragraph **A.4.a.**, **Transportation Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

We will pay up to $50 per day to a maximum of $1,500 for temporary transportation expense incurred by you because of the total theft of a covered "auto" of the private passenger type.

J. PERSONAL PROPERTY

The following is added to Paragraph **A.4.**, **Coverage Extensions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

Personal Property

We will pay up to $400 for "loss" to wearing apparel and other personal property which is:

(1) Owned by an "insured"; and

(2) In or on your covered "auto".

This coverage applies only in the event of a total theft of your covered "auto".

No deductibles apply to this Personal Property coverage.

K. AIRBAGS

The following is added to Paragraph **B.3.**, **Exclusions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

Exclusion **3.a.** does not apply to "loss" to one or more airbags in a covered "auto" you own that inflate due to a cause other than a cause of "loss" set forth in Paragraphs **A.1.b.** and **A.1.c.**, but only:

a. If that "auto" is a covered "auto" for Comprehensive Coverage under this policy;

b. The airbags are not covered under any warranty; and

c. The airbags were not intentionally inflated.

We will pay up to a maximum of $1,000 for any one "loss".

L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS

The following is added to Paragraph **A.2.a.**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

Your duty to give us or our authorized representative prompt notice of the "accident" or "loss" applies only when the "accident" or "loss" is known to:

(a) You (if you are an individual);

(b) A partner (if you are a partnership);

(c) A member (if you are a limited liability company);

(d) An executive officer, director or insurance manager (if you are a corporation or other organization); or

(e) Any "employee" authorized by you to give notice of the "accident" or "loss".

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M. BLANKET WAIVER OF SUBROGATION

The following replaces Paragraph **A.5.**, **Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

5. Transfer Of Rights Of Recovery Against Others To Us

We waive any right of recovery we may have against any person or organization to the extent required of you by a written contract signed and executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of operations contemplated by such contract. The waiver applies only to the person or organization designated in such contract.

N. UNINTENTIONAL ERRORS OR OMISSIONS

The following is added to Paragraph **B.2.**, **Concealment, Misrepresentation, Or Fraud**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

The unintentional omission of, or unintentional error in, any information given by you shall not prejudice your rights under this insurance. However this provision does not affect our right to collect additional premium or exercise our right of cancellation or non–renewal.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED – PRIMARY AND NON-CONTRIBUTORY WITH OTHER INSURANCE

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

PROVISIONS

1. The following is added to Paragraph **A.1.c.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

This includes any person or organization who you are required under a written contract or agreement between you and that person or organization, that is signed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, to name as an additional insured for Covered Autos Liability Coverage, but only for damages to which this insurance applies and only to the extent of that person's or organization's liability for the conduct of another "insured".

2. The following is added to Paragraph **B.5.**, **Other Insurance** of **SECTION IV – BUSINESS AUTO CONDITIONS**:

Regardless of the provisions of paragraph a. and paragraph **d.** of this part **5. Other Insurance,** this insurance is primary to and non-contributory with applicable other insurance under which an additional insured person or organization is the first named insured when the written contract or agreement between you and that person or organization, that is signed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, requires this insurance to be primary and non-contributory.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED PERSON OR ORGANIZATION – NOTICE OF CANCELLATION PROVIDED BY US

This endorsement modifies insurance provided under the following:

ALL COVERAGE PARTS INCLUDED IN THIS POLICY

SCHEDULE

CANCELLATION: **Number of Days Notice:** 30

PERSON OR ORGANIZATION: ANY PERSON OR ORGANIZATION TO WHOM YOU HAVE AGREED IN A WRITTEN CONTRACT THAT NOTICE OF CANCELLATION OF THIS POLICY WILL BE GIVEN, BUT ONLY IF:

1. YOU SEND US A WRITTEN REQUEST TO PROVIDE SUCH NOTICE, INCLUDING THE NAME AND ADDRESS OF SUCH PERSON OR ORGANIZATION, AFTER THE FIRST NAMED INSURED RECEIVES NOTICE FROM US OF THE CANCELLATION OF THIS POLICY; AND
2. WE RECEIVE SUCH WRITTEN REQUEST AT LEAST 14 DAYS BEFORE THE BEGINNING OF THE APPLICABLE NUMBER OF DAYS SHOWN IN THIS SCHEDULE.

ADDRESS:

THE ADDRESS FOR THAT PERSON OR ORGANIZATION INCLUDED IN SUCH WRITTEN REQUEST FROM YOU TO US.

PROVISIONS

If we cancel this policy for any legally permitted reason other than nonpayment of premium, and a number of days is shown for Cancellation in the Schedule above, we will mail notice of cancellation to the person or organization shown in such Schedule. We will mail such notice to the address shown in the Schedule above at least the number of days shown for Cancellation in such Schedule before the effective date of cancellation.

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TRAVELERS

ONE TOWER SQUARE
HARTFORD CT 06183

WORKERS COMPENSATION
AND
EMPLOYERS LIABILITY POLICY

ENDORSEMENT WC 00 03 13 (00) - 001

POLICY NUMBER: **UB-2W148891-22-47-G**

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

SCHEDULE

DESIGNATED PERSON:

DESIGNATED ORGANIZATION:

ANY PERSON OR ORGANIZATION FOR WHICH THE INSURED HAS AGREED BY WRITTEN CONTRACT EXECUTED PRIOR TO LOSS TO FURNISH THIS WAIVER.

TRAVELERS
ONE TOWER SQUARE
HARTFORD CT 06183

WORKERS COMPENSATION AND EMPLOYERS LIABILITY POLICY

ENDORSEMENT WC 99 06 R3 (00) - 001

POLICY NUMBER: **UB-2W148891-22-47-G**

NOTICE OF CANCELLATION TO DESIGNATED PERSONS OR ORGANIZATIONS

The following is added to PART SIX – CONDITIONS :

Notice Of Cancellation To Designated Persons Or Organizations

If we cancel this policy for any reason other than non-payment of premium by you, we will provide notice of such cancellation to each person or organization designated in the Schedule below. We will mail or deliver such notice to each person or organization at its listed address at least the number of days shown for that person or organization before the cancellation is to take effect.

You are responsible for providing us with the information necessary to accurately complete the Schedule below. If we cannot mail or deliver a notice of cancellation to a designated person or organization because the name or address of such designated person or organization provided to us is not accurate or complete, we have no responsibility to mail, deliver or otherwise notify such designated person or organization of the cancellation.

SCHEDULE

Name and Address of Designated Persons or Organizations:	**Number of Days Notice**
ANY PERSON OR ORGANIZATION TO WHOM YOU HAVE AGREED IN A WRITTEN CONTRACT THAT NOTICE OF CANCELLATION OF THIS POLICY WILL BE GIVEN, BUT ONLY IF: 1. YOU SEND US A WRITTEN REQUEST TO PROVIDE SUCH NOTICE, INCLUDING THE NAME AND ADDRESS OF SUCH PERSON OR ORGANIZATION, AFTER THE FIRST NAMED INSURED RECEIVES NOTICE FROM US OF THE CANCELLATION OF THIS POLICY, AND 2. WE RECEIVED SUCH WRITTEN REQUEST AT LEAST 14 DAYS BEFORE THE BEGINNING OF THE APPLICABLE NUMBER OF DAYS SHOWN IN THIS SCHEDULE. ADDRESS: THE ADDRESS FOR THAT PERSON OR ORGANIZATION INCLUDED IN SUCH WRITTEN REQUEST FROM YOU TO US.	30

All other terms and conditions of this policy remain unchanged.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective Policy No. Endorsement No.
Insured Premium $

Insurance Company Countersigned by _____

DATE OF ISSUE: **12-20-22** ST ASSIGN:

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

AMENDED WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
CONTRACTORS POLLUTION LIABILITY COVERAGE PART
ERRORS AND OMISSIONS LIABILITY COVERAGE PART
THIRD PARTY POLLUTION LIABILITY COVERAGE PART
ONSITE CLEANUP COVERAGE PART

SCHEDULE

Name of Person(s) or Organization(s)
Blanket when specifically required in a written contract with the named insured.

SECTION VI – COMMON CONDITIONS, item 17. Transfer Of Rights of Recovery Against Others To Us within the Common Provisions is amended by the addition of the following:

Solely as respects the person(s) or organization(s) indicated in the Schedule shown above, we waive any right of recovery we may have against the person(s) or organization(s) indicated in the Schedule shown above because of payments we make for “damages” arising out of your ongoing operations or “your work” performed under a written contract with that person(s) or organization(s) and included in the “products-completed operations hazard”.

However, this waiver shall not apply to “damages” resulting from the sole negligence of the person(s) or organization(s) indicated in the Schedule shown above.

ALL OTHER TERMS AND CONDITIONS OF THE POLICY REMAIN UNCHANGED.

CITY OF OPA-LOCKA

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. **Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.**

2. **Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.**

3. **Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).**

4. **In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.**

5. **Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.**

6. **Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.**

This Certification is submitted by Peter Moore, P.E., F.ASCE, ENV SP, LEED AP **the**
(Name)

President **of** Chen Moore and Associates
(Title/Position) **(Company)**

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

November 28, 2023
Date

Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA – COUNTY OF MIAMI DADE

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP being first duly sworn, deposes and says that:

(1) He/She/They is/are the President (Owner, Partner, Officer, Representative or Agent) of Chen Moore and Associates the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Witness

Witness

By: Signature

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP President
Print Name and Title

Local Business Tax Receipt

Miami–Dade County, State of Florida
–THIS IS NOT A BILL – DO NOT PAY

LBT

6597265

RECEIPT NO.
RENEWAL
6868062

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
MOORE PETER MICHAEL PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
MOORE PETER MICHAEL PE
C/O CHEN MOORE AND
ASSOCIATES INC

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE58709

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles – Miami–Dade Code Sec 8a–276.
For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida
–THIS IS NOT A BILL – DO NOT PAY

LBT

7188143

RECEIPT NO.
RENEWAL
7469215

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
MENDEZ GREGORY A PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
MENDEZ GREGORY A PE
CHEN MOORE & ASSOCIATES INC

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

1 PE64718

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

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MIAMI-DADE COUNTY

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Miami–Dade County, State of Florida
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LBT

7188144

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RENEWAL
7469216

EXPIRES
SEPTEMBER 30, 2024
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Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
KAIMRAJH PATRICK DAVENDRA PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
KAIMRAJH PATRICK DAVENDRA PE
CHEN MOORE & ASSOCIATES INC

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

1 PE78535

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MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida
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LBT

4574266

RECEIPT NO.
RENEWAL
4775459

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
CHEN MOORE AND
ASSOCIATES INC
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
CHEN MOORE AND ASSOCIATES
INC
C/O MOORE PETER M

SEC. TYPE OF BUSINESS
212 P.A./CORP/PARTNERSHI
P/FIRM

Employee(s) 12 EB4593

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54.00 09/25/2023
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MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida
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LBT

7177168

RECEIPT NO.
RENEWAL
7457162

EXPIRES
SEPTEMBER 30, 2024
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

BUSINESS NAME/LOCATION
ACOSTA JOSE LUIS PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
ACOSTA JOSE LUIS PE
C/O CHEN MOORE & ASSOCIATES

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE63827

PAYMENT RECEIVED BY TAX COLLECTOR
60.00 09/25/2023
INT-23-468318

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For more information, visit www.miamidade.gov/taxcollector

MIAMI-DADE COUNTY

State of Florida
Department of State

I certify from the records of this office that CHEN MOORE AND ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on November 7, 1986.

The document number of this corporation is J41454.

I further certify that said corporation has paid all fees due this office through December 31, 2023, that its most recent annual report/uniform business report was filed on August 23, 2023, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-third day of August, 2023

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

Secretary of State

Tracking Number: 3349928913CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

ADDITIONAL FORMS

PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. **Legal Name and Address:**

   Name: Chen Moore and Associates

   Address: 3150 SW 38th Ave, Suite 950

   City, State, Zip: Miami, FL, 33146 **Phone/Fax:** P: (786) 497-1500; F: (786) 497-2300

2. **Check One: Corporation (X) Partnership ( ) Individual [ ]**

3. **If Corporation, state:**
   Date of Incorporation: 11/7/1986 **State in which Incorporated:** Florida

4. **If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:**
   _____

5. **Name and Title of Principal Officers** **Date Elected:**

   Peter Moore, P.E., F.ASCE, ENV SP, LEED AP President/Owner — 7/1/2002

   Jose L. Acosta, P.E., F.ASCE, Vice President/Owner — 3/25/2013

   Jason McClair, P.E., CFM, LEED AP, Vice President/ Treasurer/Owner — 7/1/2002

   Safiya Brea, P.E., LEED AP, Secretary/Owner — 1/1/2011

6. **The length of time in business:** 37 years **years**

7. **The length of time (continuous) in business as a service organization in Florida:**
   37 years **years**

8. **Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.** Please see section 8.

9. **A copy of County and/or Municipal Occupational License(s)**

Note: Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractor, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.

Local Business Tax Receipt

Miami–Dade County, State of Florida

–THIS IS NOT A BILL – DO NOT PAY

LBT

6597265

RECEIPT NO.
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6868062

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BUSINESS NAME/LOCATION
MOORE PETER MICHAEL PE
3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
MOORE PETER MICHAEL PE
C/O CHEN MOORE AND
ASSOCIATES INC

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE58709

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MIAMI-DADE COUNTY

Local Business Tax Receipt

Miami–Dade County, State of Florida

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3150 SW 38TH AVE STE 950
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OWNER
MENDEZ GREGORY A PE
CHEN MOORE & ASSOCIATES INC

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

1 PE64718

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MIAMI-DADE COUNTY

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OWNER
KAIMRAJH PATRICK DAVENDRA PE
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212 PROFESSIONAL

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MIAMI-DADE COUNTY

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Miami–Dade County, State of Florida

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3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
CHEN MOORE AND ASSOCIATES
INC
C/O MOORE PETER M

SEC. TYPE OF BUSINESS
212 P.A./CORP/PARTNERSHI
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Employee(s) 12 EB4593

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MIAMI-DADE COUNTY

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Miami–Dade County, State of Florida

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7177168

RECEIPT NO.
RENEWAL
7457162

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SEPTEMBER 30, 2024
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BUSINESS NAME/LOCATION
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3150 SW 38TH AVE STE 950
MIAMI, FL 33146-1530

OWNER
ACOSTA JOSE LUIS PE
C/O CHEN MOORE & ASSOCIATES

SEC. TYPE OF BUSINESS
212 PROFESSIONAL

PE63827

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MIAMI-DADE COUNTY

State of Florida
Department of State

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GREAT SEAL OF THE STATE OF FLORIDA · IN GOD WE TRUST

Secretary of State

Tracking Number: 3349928913CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature _____

Printed Name Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

CITY OF OPA-LOCKA

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Peter Moore, P.E., F.ASCE, ENV SP, LEED AP the
(Name)

President of Chen Moore and Associates
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

November 28, 2023
Date

Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA – COUNTY OF MIAMI DADE

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP being first duly sworn, deposes and says that:

(1) He/She/They is/are the President (Owner, Partner, Officer, Representative or Agent) of Chen Moore and Associates the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Witness

Witness

By: Signature

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP President
Print Name and Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

Title: President

Sworn and subscribed before this

28 day of November, 20 23

Notary Public, State of Florida

Stephanie Williams

(Printed Name)

My commission expires: 6/7/2026

NOTARY PUBLIC STATE OF FLORIDA

STEPHANIE M. WILLIAMS
Commission # HH 238202
Expires June 7, 2026

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) **All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and**

b) **All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and**

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: Chen Moore and Associates

Authorized Signature: _____

Print Name: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

Title: President

Date: November 28, 2023

Official Website of the Department of Homeland Security

Client Enrollment

Review & Submit

- COMPANY INFORMATION
- EMPLOYER CATEGORY
- HIRING SITES
- CONTACTS
- REVIEW & SUBMIT

Company Information

Company Name
Chen Moore & Associates, Inc

Company ID
1372147

Doing Business As
Chen Moore & Associates, Inc

DUNS Number

Physical Address
500 West Cypress Creek
Suite 630
FORT LAUDERDALE, FL 33309

Mailing Address
500 West Cypress Creek
Suite 630
FORT LAUDERDALE, FL 33309

Employer Identification Number
59-2739866

County
Broward

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Chen Moore and Associates

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

500 West Cypress Creek Road Suite 630

Requester's name and address (optional)

6 City, state, and ZIP code

Fort Lauderdale, FL 33309

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–			–				

or

Employer identification number

5	9	–	2	7	3	9	8	6	6

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person** ▶ Joan Moore **Date** ▶ 1/5/2023

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

A Proposal for a Citywide Urban Forest Plan



RFP NO. 23-1128200

City of Opa-Locka

November 28, 2023

November 28, 2023

Joanna Flores
City of Opa-locka
Office of the City Clerk
780 Fisherman Street, 4th Floor
Opa-locka, Florida 33054

Re: RFP NO. 23-1128200 – Citywide Urban Forest Plan

Dear Ms. Flores and the City of Opa-locka:

We are pleased to submit our proposal in response to the Citywide Urban Forest Plan Request for Proposals for the City of Opa-locka. Our company is an important part of the Wright Service Corp. which has been providing tree management services for 90 years. Specifically, CNUC provides high-quality urban forest management consulting services since 1999. Currently CNUC has approximately 500 staff throughout the United States, Canada, and the Caribbean who look at trees daily, collect data, develop management plans, provide program assessments, create technical reports, and author urban forestry BMP's and textbooks. Our urban forest planning and tree assessment work regularly include quantifying the tree population (e.g., species, size, condition, risk ratings, maintenance needs) and proposing potential planting locations; which we develop into management action through written plans.

Our proposal will result in a comprehensive Urban Forest Plan (UFP). We would use existing data to inform the current state of the urban forest. This will likely result in a recommendation for a next critical stage of addressing ways to promote the tree inventory through future tree assessments and the type of data to collect. We also propose a tree inventory add on and ***we structured our budget to complete the UFP and a new tree inventory within your budget***. Regardless, the existing tree inventory along with other community information from several community engagement approaches will support development of the UFP. Communication during the project is important! Prior to starting data collection, we always use our initial meeting to make sure all data and information is collected to best meet your needs. Certainly our proposal lays out what we will do, but communication throughout is vital. Thus, the existing tree inventory, community plans, current state of the urban forestry program, and community engagement is important to develop a future urban forest that is equitable for all community members.

Our experienced ISA Certified Arborists, Municipal Specialists, Board Certified Master Arborists, and Tree Risk Assessment Qualified personnel have worked with municipalities and utilities to inventory and assess tens of millions of trees. We are experienced in prioritizing the maintenance requirements of trees and understand the harm that can occur when they are not managed adequately. In our daily job duties, we have spent countless hours engaging community members about their trees, the value, and how to manage tree risk. These tree assessments often become written reports from a brief synopsis to complete management plans. We will proudly bring that understanding of trees to your community and complete your scope of work as a workable and practical plan.

On behalf of CNUC, thank you for giving us the opportunity to respond to this invitation to bid. ***We are national in scope and local at heart with work past and present in Florida***. We look forward to beginning a mutually rewarding partnership.

Sincerely,

Richard Hauer, BCMA, TRAQ, Ph.D.
Director of Urban Forestry
rhauer@cnutility.com
715.310.6939

Sarah Lilley, CA, TRAQ
Supervisor of R&D
slilley@cnutility.com
310.738.9760

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Letter of Transmittal: Letter of Interest

We appreciate the opportunity to provide details of our qualifications to successfully complete an Urban Forest Plan (UFP) as detailed in the Request for Proposals (RFP). To best meet the RFP Rules for Proposals and Submission of Proposals requirements, we have combined the Minimum Qualifications Part II – Nature of Service section with the Part III Proposal Requirements section. We did such for completeness, brevity, and to best respond. We read the details as described in the Scope of Services, and understand well what you want and how we are poised to carry out this work.

In brief, the City of Opa-locka is looking towards the future with *an urban forest that is assessable and equitable for all residents and visitors of the community.* To accomplish this vital vision, our plan within the Scope of Services section details our approach. Succinctly, this requires our coordination of meetings with city personal and undertaking successful community engagement. The community engagement component is really an important part of developing an equitable urban forest for all. Our review of the current state of the urban forest will address the existing governance through community plans, policies, and ordinances, along with other pertinent materials found during discovery. Our assessment of the current state of the urban forest resource will create a future plan for periodic assessment and monitoring through metrics to evaluate the tree population. We will relate the current state of the urban forest in this framework.

The example actions above will likely find areas for improvement and places that the community does well. As an example, the desire for an equitable urban forest is a positive position to reach towards. Addressing the future urban forest by considering what the impending climate might be, is important to create a resilient urban forest for what future environmental conditions. Undertaking a resource assessment of the tree population and locations where tree canopy exists on private and public lands is important to establish a baseline condition today. This information will then provide a metric to evaluate against as the urban forest develops towards the goals set in the UFP.

We are well positioned to develop the metrics to evaluate against, having led the 2014 baseline assessment of Municipal Tree Care and Management the United States. We are also leading the 2024 update of this work. Further, we authored the seminal textbook Urban Forestry: Planning and Managing Urban Greenspaces (Miller et al., 2015). This understanding of national and Florida specific work in conjunction with University of Florida researchers will help us inform you on how your program should be funded, staffing levels, and management of the urban forest resource. Our knowledge of community forestry programs will provide you with workable and action-based approaches to engage the community into what they want in the urban forest and how to best develop an urban forest across all lands. The following details will help you to better understand who we are and how we are qualified to lead your project.



Name of entity, its mailing address, telephone, email address: We are a company that is *national in scope and local at heart*. Our company work reaches across North America and beyond, however, we make a local bond with each client. Our national headquarters are 5930 Grand Ave, West Des Moines, IA 50266; (844) 764-2682. We also have local staff living in and working in Florida, and have

also completed urban forestry work within the state. Thus, we know the vegetation and urban forestry operations within Florida. Our resume section in the proposal names the key personnel who will conduct the work in your community. They bring a diversity of ideas and abilities that creates an exceptional team. And on site, our address is your community as we mobilize to undertake the resource assessments, community engagement, and meetings with city personnel. We are also a phone call, e-mail, or video conference away when needed. For this particular project, the overall project manager is Rich Hauer, 1420 Sand Hill Lane, Stevens Point, WI 54481; (715) 310-6939. We also will have a Florida expert through Luke Wholtmann.

B. Consultant availability, personnel and resources necessary to provide on-call consulting services: We will easily be able to accomplish the full scope of work and services as requested and proposed in our response. We have our municipal forestry team with adequate staffing to meet the current project. With approximately 500 employees within the CNUC team, we also have the ability to tap into additional staff. Our mobilized staff would have the ISA CA credential and have existing local knowledge. Writing an UFP will also occur easily, having been involved with over 100 plans, through development and editing. Thus, we know the time frame commitment, and also if needed work late into the day or the weekend to complete a job. Thus, we understand well the staffing level needed, time allotment required, and plan for any contingencies to be able to meet or exceed the required date to complete the work. Since, your timeline is important to use, and as we understand, important to put the proposed plans to work in April 2024.

C. Exceeding Minimum qualifications listed in Section III: Our brief resumes provided in our proposal response details our meeting and exceeding the International Society of Arboriculture Certified Arborist credential. In additional, we have an ISA Board Certified Master Arborist on the team, team members holding the ISA Municipal Specialist, and also have several on the team with the ISA Tree Risk Assessment (TRAQ) Credential. Overall skills and past projects are shown in Appendix A & B.

D. Intention of the consultant to adhere to the provisions described in the RFP: We attest we will adhere to all provisions as described in the RFP and as in our response.

E. Expected to sign a service provider agreement with the City: We sincerely believe we will exceed your expectations and will be honored to sign a provider agreement with the City of Opa-locka.

F. Contact person responsible for the submittal, specifying the name, title, and contact information: The team of the proposal will be collectively responsible to carry out our proposed scope of work. Project responsibility rests with: Richard J. Hauer, Ph.D, Director of Urban Forestry | e-mail: rhauer@cnutility.com | cell: (715) 310-6939

G. Person signing the letter of interest must be a legal representative of the consultant authorized to bind the consultant to an agreement in the event of an award: Within our urban forestry consulting team, Josh Bever, CNUC Senior vice-president, has contact signature authority to sign the letter of interest.

To close, when we start a project, we like to take a step back and frame the situation as what would we want if we were the community. Addressing this is rather simple as communication is first and foremost critical for project success, regardless of role. The data collection process is rather easy for us and developing an actionable plan is also for us a natural extension from a tree inventory, program and community assessment, and the resulting UFP. Thus, at the heart of selection of a firm, it really comes down to price and trust in us. We have developed a budget in mind with effectively and efficiently completing the scope of work. As for trust, our references can validate what we stated above. Our past body of work and diverse background shows us creating urban forestry methods and approaches that others implement in their work. We still consistently evaluate our approaches and improve or modify to fit a situation. And, we imagine by selecting us, you already have 100% confidence you will be happy with our project outcome. Completing the project within budget and scope is our pledge to you.

General Information

Our response to the general information request follows.

Name of Business: CN Utility Consulting

Mailing Address: 5930 Grand Ave, West Des Moines, IA 50266

Phone Number: (844) 764-2682

Names and contact information of persons to be contacted for information or services if different from name of person in charge: Same as above | Richard J. Hauer, Ph.D, Director of Urban Forestry | e-mail: rhauer@cnutility.com | cell: (715) 310-6939

Normal business hours: 8:00 am to 5:00 pm within a time zone, but variable according to task/job at hand.

State if business is local, national, or international and indicate the business legal status (corporation, partnership, etc.): We are an international corporation with operations currently within North America and the Caribbean's

Give the date business was organized and/or incorporated, and where: Our firm is incorporated in Iowa since 1999.



Give the location of the office from which the work is to be done and the number of professional staff employees at that office: Our work will be completed remotely through company approved home offices. Some administrative tasks will occur at our corporate headquarters in West Des Moines, Iowa where more than 250 Wright Service Corp. employees work. However, most of our company staff historically works remotely through a home office or operating at a job location.



Indicate whether the business is a parent or subsidiary in a group of firms/agencies. If it is, please state the name of the parent company: CN Utility Consulting is a company within Wright Service Corp.

State if the business is licensed, permitted and/or certified to do business in the State of Florida and attach copies of all such licenses issued to the business entity: We are licensed and permitted to conduct work in the State of Florida and currently working within the state. Details are provided in the Appendix.

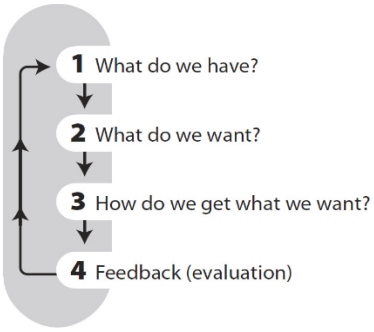
Project Approach: Scope of Services

This proposal describes the approach to develop a long-term Urban Forest Plan (UFP) to exceed the RFP details (Appendix C). The UFP will guide the continued maintenance of existing trees and propose ways to enhance the future urban forest across public and private lands. The result is an UFP that creates an equitable urban forest through a community-based vision, with strategies to get there. The plan will create goals based on community engagement and the state of the urban forest from the tree inventory. Measurable objectives will have actionable steps to complete to reach the desired goal endpoint.

Urban Forest Plan

The UFP will entail recommendations on program structure, governance, funding, community engagement, the tree resource, and other important UFP details described throughout the proposal response. The UFP will incorporate at least one Benchmark approach and key Criterion and Indicators to evaluate the success of growing the urban forest such as **(Clark and Matheny et al. 1997; Hauer and Peterson (2016); SFI U&CF Sustainability Standard)**. The UFP will follow the model of **Miller et al. (2015)** which articulates planning by:

- ☑ **What do we have** (e.g., inventory and assessment of the tree resources, history, environment, previous plans, ordinances, and other critical factors)
- ☑ **What do we want** (e.g., vision based on public engagement to discover their urban forest and greenspace wants and needs)
- ☑ **How do you get what we want** (e.g., strategic direction based on vision, goals, objectives as guided by what you have and what you want)
- ☑ **Feedback** (e.g., evaluation of program progress to meet goals and objectives and adapt as needed)



We believe that a successful UFP is one that is implemented via actionable ideas that a community can support. To that end, we use several iterative rounds of UFP draft development and revision. A workable UFP is not a last-minute task. Instead, we would start the draft development early on and refine based on City staff and the community comments. Several internal rounds within the project team would occur to draft our ideas based on the findings from tasks 1-5, detailed below.

We would keep key City personnel informed during our planned check-in-meetings. This will continue into the draft UFP stage that best reflects what we heard and learned up to that time. Our plan will be revised with suggestions for changes from the draft comments. While we could skip the public review part, we believe this is vital to proactively identify gaps and a desired direction for the plan to best meet what the community desires.

In addition to the UFP, we propose to develop a set of four infographic reports to complement the UFP (e.g., State of the Urban Forest, Urban Forest Value & Ecosystem Benefits, Tree Canopy Assessment, Key Actions to Growing the Urban Forest). These one-pager reports will highlight the most vital details we discover and provide easy to follow points to ponder. These will also be easy to follow for Opa-locka residents and be shared by your website.

Task 1 - Work Plan, Kickoff Meeting, and Project Management

A good plan results from excellent planning, communication, and collaboration. Overall co-project management occurs through Sarah Lilley and Liz Lingo taking the lead with supervising and assigning project staff and project

management. Their combined role is vital to ensure tasks and sub-tasks are completed as anticipated, ideally ahead of schedule. Rich Hauer will further oversee the project as a subject matter expert, and backup project manager. Weekly to bi-weekly meetings will occur to keep us on track. If deviations are needed, our team will respond with alternative plans to complete the final UFP by April 2024 (potentially flexible). If awarded the contract, a draft work plan would be submitted one week prior to a kickoff meeting. As an example of how we would develop subtasks for a task, the kickoff meeting task example is below.

Task: Kickoff Meeting

Subtasks: (1) schedule in-person meeting and virtual attendance option with assigned City staff; (2) develop meeting agenda with identified times and lead roles of the project team; (3) work with the City to ensure meeting applicable public meeting criteria; (4) submit work plan at least one-week in advance of meeting; (5) conduct meeting and identify recording method(s); (6) modify work plan as needed per meeting instructions and repeat until approved.

Goal: Overall goal is to review and modify the work plan as needed to accomplish the project.

Schedule: January 2024

KPI's Milestone: Draft work plan developed and modified resulting in final plan.

Project management is vital to ensure meeting budget targets, meeting deliverables, keeping all parties abreast with schedules, and other milestones. The team has extensive project management experience through hundreds of projects and assignments.

Task 2 - Community and Stakeholder Engagement

The inclusion of people in the decision-making process is both vital to making proper decisions and an important part of engaging people in their community. Existing public engagement is a start, with the **Comprehensive Development Master Plan & Land Development Regulation/Zoning Code** as an example to build upon. We will propose an approach in the UFP with how to engage the community to refine the UFP over time to instill what the community envisions. For this project and to fit your scope and complete the UFP in a timely manner, we will undertake a rapid assessment of community engagement and propose a system such as below for public engagement.

Internal Engagement and Foundational Work

An important milestone is **establishing and engaging appropriate governance** groups to be a part of the engagement component. To that end, potential Boards & Committees and Programs/Departments to engage include the Historic Environmental Preservation Board, Community Relations, Recreation and Activities Board, Planning and Zoning Appeals Board, Neighborhood Beautification, Economic Development through the Planning & Community Development Department, Public Service & Recreation, and the Neighborhood Improvement Program. These are logical as they promote the maintenance of existing grounds and the development of land. We also will identify groups and people who know how trees make a community a more vibrant and higher quality place to live and work. The work should also complement and **integrate into the Sustainable Opa-locka 20/30 Comprehensive Plan**.

Identification of Need and Structure for a Tree Commission

We will propose a method for developing a **Technical Advisory** ad hoc Committee is created to review UFP technical merits. We would develop a list of potential candidates to invite from the existing Boards & Commissions. We would further develop a list of potential external members to complement the member skills set. The group would be advisory and a

way to engage the community as we develop the UFP ideas. We would work with our identified Opa-locka point of contact to get final approval before inviting members. We would propose a 3- to 5-person technical advisory to further represent the interests of the community. Currently this role is served by the Historic Environmental Preservation Board, which may be the best place, but we will help verify this.

A potential outcome is evaluating if a **Tree Board or Tree Commission** would be important going forward to support your urban forestry work. Perhaps one exists, but we were unable to ascertain if such exists and if so wonderful, we have a group to work with. Ideally such a group could be 1 to 2 members from a tree technical background (e.g., state U&CF coordinator or industry professional, university specialist in arboriculture), 1 to 2 private industry members with credentials in arboriculture and urban forestry, an Opa-locka staff member, and 3 to 5 members of the community for a group with 5 to 7 members. We propose a structure to keep the Technical Advisory Committee in place as perhaps an ad hoc or subcommittee of an existing board or commission or as a new group to review benchmark outcomes annually.



Public Engagement by Focus Group, Community Event(s), and Survey

Outside of this project, we will identify a future **urban forestry focus group** approach to discover the community vision and potential strategies to make this happen. As an example, in our plan, we would propose an in-person day-long event. Prior pre-work will occur to develop a system to actively engage the Board & Commission member group(s) that best represents the City. The pre-work would ask participants to answer questions about their vision(s), strengths and weaknesses of current forestry operations, threats or challenges, and opportunities or approaches they might think would be important for developing the urban forest. This information would be the basis for a visioning statement and goals for the Opa-locka urban forest for the participants to review and modify during a working group meeting. These findings would further be used to bring to the community events for validation and verification.

The findings from the Stakeholder Focus Group and proposed public opinion survey would help guide the technical group in the future. This group would be engaged to review and propose adherence to industry BMPs and guidance with tree selection, tree planting and establishment, relevant tree maintenance over the design life, and a risk assessment process to determine actions required for public safety. One advantage our team brings to the UFP development, we are an established part of developing industry standards and BMPs (ANSI A300 and ISA BMPs) and have developed several models and approaches for urban forestry assessment (Miller et al 2015, Hauer and Peterson 2016). Ultimately, we will help guide the process and provide guidance for a community developed and adopted process.

KPI's Milestone: Strategic Advisory Committee developed; Technical Advisory Committee developed; community engagement in-person meetings held; consumer survey conducted; future community engagement approaches developed.



Task 3 - State of the Urban Forest

The development of the UFP will be data driven while also reflecting the experience of local communities. As much as possible, the state of the urban forest must be understood in the historical context of how trees in Opa-locka have changed over time. Data itself cannot determine the state of the urban forest. Our team will bring expertise in typical ways of analyzing data about the urban forest, but also uses the local experience that City staff and the community have about their urban forest during initial rounds of community engagement through the process described in task 2. This information will be a central topic of the state of the urban forest and our approach described below.

Current Urban Forest Inventory: A tree inventory is a first step with assessing the current state of the urban forest. First and foremost, growing trees in Opa-locka faces challenges due to weather (e.g., summer storms, hurricanes, and other loading events), climate (e.g., temperature, and precipitation), and construction (e.g., new and redevelopment). Our CNUC team of employees has experience with plant assessment and selection for this environment as our inspection staff routinely assess vegetation from tropical to temperate locals. As part of the team, Rich Hauer was trained in urban forestry, botany, and tree biology. Luke Wholtmann has extensive experience working with plant communities in Florida and is an expert with Florida plant communities. Finally, Rich Hauer is a plant selection expert having taught and researched plant communities throughout the world as a professor teaching dendrology and woody plants courses for several decades, along with forest health. Thus, we will use our experience and the inventory to create a State of the Urban Forest with existing and proposed future plants, and we will propose a system for detecting changes with continued future tree measurements. We will undertake the follow assessment actions in this task:

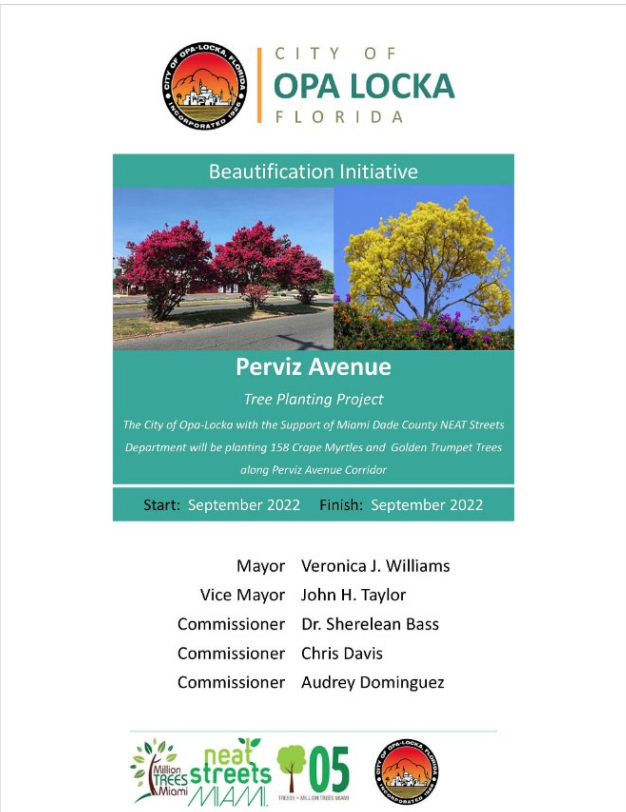
- ☑ Conduct an analysis of the urban forest composition and identify tree species diversity, tree condition, maintenance requirements, tree health concerns, and create a framework for future assessments to identify trends. This assessment will also be compared to regional tree populations and national benchmark data we have developed that makes us unique. The system can also be updated with new trees.
- ☑ The existing inventory will create a summary of management needs of the urban tree population and potential costs. The management needs will also be prioritized as to what actions to take and when. This will be completed through a multiyear budget for management recommendations we develop.
- ☑ Identifying pest issues and the potential for pest issues based on the tree population will result in recommendations in an insect and disease recommendation section of the UFP. Our staff has expertise in plant health care and will propose controls to undertake, and species to plant for Opa-locka.
- ☑ The UFP will further identify and provide recommendations for potential tree planting needs. Site limitations and land use will dictate the potential to increase trees and tree canopy in the community. Our tree canopy assessment work described below will provide an insight into the current tree canopy state and a potential canopy target.
- ☑ An assessment of the ecosystem values of the tree population will occur using the i-Tree Eco system. The tree inventory system proposed as an add-on to the RFP has suitable information to complete an assessment. We also have proposed an approach in our tree inventory response to collect tree condition in a way that tree valuation using the Council of Tree and Landscape Appraisers systems is also possible. This approach will also provide an asset value of the public resource for inclusion in City financial reports. Tracking the tree population as an asset is important and would make Opa-locka one of few places that currently do such.



☑ A Tree Canopy Assessment (TCA) analysis is a popular way to see what you have, where it is located, and help develop targets to plan towards. We propose a sample point based TCA as an initial point to see what you have. A study we co-authored found a 14.3% canopy cover for Opa-locka (Salisbury, Koeser, Hauer et al., 2019). However, how canopy cover varies across the community is unknown. Our proposed sample point system also has an advantage in that we can train city staff to use this approach in-house to monitor your progress over time. The system is relatively easy needing only a few hours to train a person with rudimentary ArcMap GIS skills. A random sample of 2,000 locations would be assessed to detect ground layers as tree/shrub, grass/herbaceous, impervious, soil, agriculture, and water. The sample size will produce a high margin of certainty and will also allow disaggregation into various land uses, City council boundaries, and any other land management boundaries in a GIS shapefile. This work will also help direct the planting of trees.

☑ Finally, our plan will focus on the use of visual displays to illustrate findings. The use of illustrations, charts, graphs, and other visual means makes communicating information easy and an effective way to educate community members about the current state of the urban forest.

Tree Planting Program



Urban Forest Plan and Governance: We will gather current policy documents (ordinances, employee manuals, regulations, adoption of industry standards, etc.) and interview key City of Opa-locka staff and partners managing the urban forest. These interviews and our review of the documents will focus on using a standard Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses. Ordinances Section 8.2, 15-3, 15-4, 21-122, and other locations within the municipal code pertain to trees. These would be reviewed to determine if they are still effective, for adherence to current professional standards (e.g., ANSI A300 and ISA BMPs), and identify any gaps.

Best Management Practices: We will use our knowledge of industry standards and best practices, experience in working with other cities, local community insight, and additional research to compare how Opa-locka' s urban forest and management compared to best practices. This will include the latest science, industry standards (such as ISA BMPS), and a wide variety of metrics of success, many of which are easily measurable. We will also work to align best practices with local community values to help support greater adoption and sustainability. In summary, this work will help with making better tree management decisions.

Future Data Collection and Tracking: While City staff and community members may ask questions that cannot be answered with current data, we believe that there is enough existing information available to give an accurate view of the urban forest. We plan to summarize the

current state of the urban forest using existing data and offer some options for future data collection and tracking. The end resulting system will be based on a solution that best works for you and will also allow you to use the data through your community tracking, dashboard, or potentially the Build Better Opa-locka online service request portal.



Task 4 – Vision, Goals, and Metrics

Once we have gathered information from the community engagement process, understand the state of the urban forest, and conducted SWOTs with City staff and external parities, we will focus on crafting UFP actions that have measurable outcomes. These will also consider ways to incorporate benchmarks and metrics into your community dashboard. In our experience, the most successful vision and goals are created in partnership with actively engaged staff, partners, and community members. We will encourage City staff and stakeholders to take ownership of the final vision and goals, with the active input and support of the consultant team.

Vision: The vision is community-driven and as much as possible will be linked to existing City plans and documents, informed through staff and partner interviews, and ultimately created by listening and collecting the community's thoughts. The vision should reflect an inclusive process and inspire action, providing a roadmap for how the community can work together to achieve its shared goals. It is important to engage a variety of City Departments and other stakeholders across the City to find a shared vision. Our team will also use the vision statement with infographics to display what the vison truly means.

Goals: The goal setting process will gather broad input from the community, including internal and technical stakeholders. Our team will help synthesize this input and support the City in consolidating and prioritizing specific and measurable goals that reflect the priorities of the community. We will work to ensure that the vision, goals, and metrics of success are all parts of a cohesive whole.

Metrics of Success: Like the vision and goals, we believe that the City should be empowered to set their own benchmarks for success, with support from our team. We will use our technical expertise to guide this process more closely and offer independent views on how data can be collected to answer specific questions and provide a system to track reaching identified goals. An example tree planting goal would include developing a scope of tree planting over a time period and tracking the success towards reaching the goal. As an example, a 20-factor urban forestry sustainability model would also be proposed for use to track the UFP progress.



Task 5 – Recommendations and Implementation Strategy

By this stage, we get to take all we learned from the previous tasks and integrate the developed community-envisioned goals with actionable

City of Opa-Locka Vision Statement: the City aspires to be a successful and financially stable full-service community that offers ample economic opportunities to its residents, boasts a vibrant and distinctive Downtown and healthy neighborhoods, and provides excellent services and a great quality of life to residents, businesses and visitors.

Example Urban Forestry Vision: Thinking forward by growing an equitable, resilient, and sustainable urban forest for all.

Goal: Identify potential planting locations and the cost to implement a tree and associated plants planting plan

Objective: Identify and allocate the resources required to full plant all locations within 7 years

Action: Mobilize staff and/or contractors to plant 20 acres of green space and 400 trees annually though 2030

ways to make them happen. As an example, engagement may tell us that a significant percentage of the community envisions a 30% overall canopy, but tree canopy densities might vary by neighborhood. A one-size-fits-all approach might not be the best approach. For example in industrial areas it might not be possible to hit that target. Other areas that are currently underplanted could make up for the challenging locations. Thus, a goal then is to maximize tree canopy where possible with a target to have green space assessable for all within a 5 minute walk. Having multiple rounds of engagement and touchpoints with the community will help us determine the best overall approach, including important nuances for diverse groups and various locations throughout the community. The State of the Urban Forest along with tree species tolerance to anticipated change in climate will drive tree preservation, maintenance, and selection of planting recommendations. The Miami-Dade tree canopy goals serve an example and an important connection to the region through the efforts undertaken by the resulting UFP (Exhibit 1).

What we learn through public engagement and our team's technical expertise will inform our recommendations and implementation strategy tasks. We will also work to understand the



dynamics within the various City departments and will be able to propose an integrative framework of governance for the best management of public trees along streets, within parks, and on private lands.

Task 6 – Draft and Completed Final Urban Forest Plan

As part of the final deliverables, we will provide a draft UFP for review. The review provides an examination for clarification, additions, and retractions from the draft. A final UFP will result in a long-term plan to guide urban forestry into the future.

In summary, the resulting outcomes from tasks 1 – 5 are used to identify key approaches to complete an UFP in task 6. Our team will consider various models to help guide the development of principles, goals, objectives, and assessment of the urban forest as below:

- ☑ The Miller et al. (2015) planning model
- ☑ The Hauer and Peterson (2016) benchmarks
- ☑ The Clark and Matheny et al. (1997) model

Exhibit 1 – Build an equitable tree canopy countywide.

- Set a bold goal: to achieve 30% overall tree canopy countywide by 2030, prioritizing areas that are currently well below our current countywide average of 19%.
- Expand the capacity of Adopt-a-Tree and the Million Trees Miami Campaign to deliver on their ambitious goals by connecting them to resources and facilitating their reach into every community across Miami-Dade.
- Leverage the ongoing Urban Tree Canopy Assessment update, due to be released in late 2021, to identify areas of the County where tree canopy is most needed.
- Take steps to make the County a Tree City USA and commit a meaningful amount of the County's budget to making this possible.
- Incorporate key equity goals, including making meaningful progress greening neighborhoods with significant heat-related public health challenges.

Source: THRIVE305 ACTION PLAN

Experience and Qualifications: Key Personnel and Firm

The project team exceeds the requested minimum criteria to conduct the Scope of Work. The project manager holds the ISA BCMA credential (WI-1521BM) and been involved with urban forestry work since 1986 through the field application of collecting data, developing data collection systems, and academic research testing and improving ways we manage the urban forest. The team has experience working within the State of Florida. Luke Wohltmann is a Florida State University graduate in Environmental Science and has worked through managing vegetation in Florida. Rich Hauer has completed work accessing community forestry programs through the 2014 Municipal Tree Care and Activities work, through contract and collaborative academic work with the University of Florida. This UFL work includes urban forest resiliency through evaluating the effects of hurricanes on the urban forest. We also investigated the effectiveness of tree ordinances upon tree canopy within Florida Communities with Opa-locka one of the 300 communities in our study (Salisbury, Koeser, Hauer et al., 2019). Most recently we investigated the equitable distribution of the urban forest throughout Florida and tested the 3-30-300 rule for proximity to urban tree attributes. Specially this involves a person having at least 3 trees within the view of their home, living within an area with 30% tree canopy, and have access to a public green space within 300 meters (e.g., ~ 1000 feet). We also have extensive work through urban forestry operations within the United States.

The project team members exceed the experienced background in tree assessments, program review, community engagement, and developing actionable reports. This experience has occurred through professional work and extensive formal training through various educational approaches. Thus, we value our collective background and our potential to put this expertise to work for you! We also have extensive experience with taking information pertinent to the situation and developing creative management plans to inform and create action to work towards improving a system. Our qualifications follow and are also detailed in Appendix B.

RICHARD HAUER, PROJECT MANAGER



Dr. Hauer is CNUC's Director of Urban Forestry and brings over three decades of experience to the project team. As an early career professional, Rich gained experience as a practicing arborist and urban forestry consultant. These experiences later resulted in overseeing the Shade Tree Program in Minnesota. Rich has served as a Professor of Urban Forestry for the past two decades, and he remains professionally active as an Emeritus Professor of Urban & Community Forestry. He served as president of the Arboricultural Research & Education Academy, Minnesota Society of Arboriculture, and Wisconsin Arborist Association. Dr. Hauer also served as chair of many professional and academic committees. Rich is co-author of the *Urban Forestry: Planning and Managing Urban Greenspaces* textbook. Rich is active in the development and publication of urban forestry research with over 200 publications. He also speaks regularly at local to international conferences with over 500 professional talks. He is an associate editor of the Journal Urban Forestry & Urban Greening.

Education and Certifications

- Associate of Science, Horticulture Tech.
- Bachelor of Science, Urban Forestry

- Master of Science, Urban Forestry Tree Health and Biology Emphasis
- Doctor of Philosophy, Urban and Community Forestry Capacity Building
- ISA Board Certified Master Arborist
- ISA Certified Municipal Specialist
- 2023 Alex Shigo Education Award for Arboricultural Research, International Society of Arboriculture (ISA)
- 2022 Honorary Life Member Highest Award, Wisconsin Arborist Association
- 2018 L.C. Chadwick Award for Arboricultural Research, ISA
- 2017 Excellence in Teaching Award, University of Wisconsin Board of Regents
- 2016 Legacy Project of the Year Award, Society of Municipal Foresters
- Coauthor *Urban Forestry: Planning and Managing Urban Greenspaces*. Third ed. (Miller et al. 2015)

SARAH LILLEY, INVENTORY AND UFP SUPERVISOR

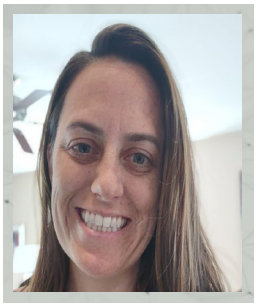


Sarah Lilley is CNUC's Supervisor of Research and Development and oversees municipal and utility projects across the US. She conducts training both for company staff and for clients' in-house teams and contractors and is proficient in the analysis of LiDAR data and GIS software systems. She has over seven years of arboricultural experience, and over ten in green industries, including utility corridor and municipally owned tree inventories. She has assessed thousands of trees, native and ornamental, across the country for risk and condition. She currently resides in coastal Connecticut and has experience conducting tree inventories throughout the US and spent her formative arboriculture years working and learning in southern California. *Sarah has excellent experience working with plants in a Southwestern US environment.*

Education and Certifications

- Bachelor of Science, Biology + Environmental Studies
- Certificate in Sustainability
- 2023 Graduate of the Green Communities Leadership Institute
- ISA Certified Arborist
- ISA Certified Utility Specialist
- ISA Tree Risk Assessment Qualified (TRAQ)

LIZ LINGO, ASSOCIATE URBAN FORESTRY CONSULTANT



Liz recently joined CNUC in 2023, having successfully led urban forestry and parks operations in the City of Rehoboth Beach, DE. As the City Arborist she developed their Urban Forest Management Plan and Tree Risk Plan. Prior that this, Liz was a Consulting Arborist working to improve and maintain trees within private landscapes. She also working for New York City Parks creating management plans, work schedules, and planting plans for restoration.

Education and Certifications

- BA in Environmental Science
- ISA Certified Arborist
- ISA Tree Risk Assessment Qualified (TRAQ)

PAOLA NANSEL, INVENTORY ARBORIST & URBAN FORESTER



Paola has worked with CNUC since 2022 and has already made a positive impact on the utility and municipal projects on which she has worked. With CNUC she has worked in California,

Washington state, South Dakota, Michigan, Indiana, and Wisconsin, quickly adapting to different forest compositions and project specifications. Paola studied Forest Engineering at the Universidade Federal do Paraná, with a year spent in an exchange program with the University of Idaho Forestry program.

Education and Certifications

- Bachelor of Science, Forest Engineering
- ISA Certified Arborist
- ISA Tree Risk Assessment Qualified (TRAQ)

LUKE WOHLTMANN, INVENTORY ARBORIST & URBAN FORESTER



Luke has worked with CNUC since 2021, after graduating with a Bachelor of Science in Environmental Science from Florida State University. He quickly moved from a field position to a supervisor position while working on a contract in Florida. He then took on a Traveling Field Specialist position, traveling to contracts in need of assistance. Luke is adaptable to different environmental conditions and scopes of work, and quickly becomes familiar with the local and ornamental trees in the areas where he has worked.

Education and Certifications:

- Bachelor of Science, Environmental Science
- ISA Certified Arborist
- OSHA General Industry

CHARLES ELMER, INVENTORY ARBORIST & URBAN FORESTER



Charles has worked with CNUC since 2023, making impactful contributions to our team from day one. He was instrumental to our inventory work with Commonwealth Edison (ComEd) and a tree failure study. Most recently he was co-leading an inventory project with Quincy, MA and Groton, CT. Prior to joining CNUC, Charles has developed community engagement plans, tree canopy assessments, and urban forest management planning approaches for communities.

- Bachelor of Science, Biological Systems Engineering
- M.S. in Environmental Science
- Programing ArcGis and R



Firm Experience

As with any proposal, selecting which past experiences you would like to highlight can be a challenge to pick from the many. In our references section in the proposal and on your reference form, we selected past clients that show a diversity of experiences. In addition to projects we present that show our national work, we have selected examples of Florida specific work in collaboration with the University of Florida. *This work also included the Mami-Dade county region, along with Florida statewide*. This work includes understanding trees and storms, hurricanes in particular, and how to develop a more resilient urban forest. We have conducted community engagement throughout Florida to address the equitable distribution of tree canopy. We further have been involved with tree canopy assessments in Florida. From this work we developed models to test the effects of tree ordinances on the trees and development and the effects up on tree canopy. These along with others involve our work with trees along streets, in parks, and within utility corridors. Throughout these locations that span a diversity of locations from rural to suburban to urban and even stand-alone communities, we inventory over one million trees a year. Regardless of location, we constantly consider the adjoining lands and ownership in decision making.

Our observations are made with tree identification, tree size, tree condition, tree risk, and many other details in mind, which at the end of the inventory our assessment is used to create meaningful reports to support decision making. Thus, through our work, hundreds of reports are made annually that range from simple reports detailing a few trees though a one-page assessment to reports exceeding a hundred pages in size. Within the urban forestry realm, Rich Hauer was the principal investigator for the 2014 and current ongoing ***Municipal Tree Care Activity Assessment of Communities in the United States.*** This report details the state of urban forestry in many suburban communities.



He also is author of over 200 publications that pertain to urban forestry projects, that again transect peri-urban to suburban to core city locations. We also provide our City of River Falls and State of Wisconsin clients as two recent examples and references of urban forestry projects at the municipal level in which tree inventories and urban forestry management reports were an outcome.

General Firm Information

Since 1999 our CNUC experience has evolved through complex projects throughout North America, all focused on vegetation management, rural to municipal forestry projects and consultation. While our headquarters reside in West Des Moines Iowa, we are ***National in Scope and Local in Heart***. Our consultants work throughout North America primarily through remote work locations at a field site and through remote home offices. Currently, our employees include over 500 people working throughout North America, including approximately 120 Certified Arborists. These locations provide experience and expertise in climates ranging from desert to humid climates that vary in precipitation from little to levels that naturally are conducive to natural forest communities.

Our staff also includes arborists and urban foresters that hold credentials as the International Society of Arboriculture Board Certified Master Arborist (BCMA), earned status as a Registered Consulting Arborist (RCA) from the American Society of Consulting Arborists, and numerous staff with the ISA Tree Risk Assessment Qualification (TRAQ) credential. We have long-term contracts in 28 states and two Canadian provinces. We also have developed hundreds of reports, ranging from those documenting a few trees at a site to much larger tree inventories, guidance for operations, and management plans. Appendix B provides three examples of relevant & current projects related to this project.

As a company, CNUC has contracts and support offices located across states (including Arizona) and in Canada, with company headquarters located in West Des Moines, Iowa. CNUC is part of Wright Service Corp. (WSC), incorporated in 1962 with Wright Tree Service starting in 1933 a vital part of the history. Collectively, we are part of over 6000 employees within WSC In addition to our urban forestry management planning work, we also conduct a variety of work such as tree care, utility pruning, tree inventory management, software programs, and environmental services.

For this proposal, we have collected a team of urban forestry and planning experts who have developed past works relevant to the proposed scope of work. Specifically, the project team has credentials through advanced degrees (B.S. to Ph.D.) in urban forestry and industry credentials (ISA Board Master Certified Arborist, Certified Arborist, Municipal Specialist, and Tree Risk Assessment Qualified). The team together has over 50-years' experience with urban forestry management across a variety of urban forestry landscapes within commercial, municipal, and utility forestry locations. The team has authored over 200 publications including urban forestry management plans, technical publications,



urban forestry textbooks, and Best Management Practice (BMP) guides to manage urban tree populations. This work includes tree inventories, management plans, ordinance development, tree planting and selection, tree risk assessment, and other work relevant to the care and management of trees in communities. Further, we have given over 500 presentations to community members, professional arborists and urban foresters, and related groups. Our project team would be proud to use this experience to accurately inventory your trees and develop an Urban Forest Management Plan.

Schedule: Anticipated Timeline

We are ready to start soon after a signed contract is approved by all parties (Exhibit 2). We tentatively believe a January 2024 start is likely with an anticipated December time period for city review of proposals and contract signing. However, we are ready to go as soon as a contract is agreed upon. A completion date is set

for April 2024 to meet your desired timeline for a UFP. In brief, our project starts with a kick-off meeting. We plan on this being an in-person meeting, having budgeted for two meetings with a virtual access also proposed. The goal is to review the agreed upon scope of services and determine a final plan of action. Throughout the project we will host periodic updates, this will mostly be remote through telephone, virtual video meeting, and other electronic means. Our community engagement plan will involve in-person approaches. And the project progresses through data collection, we will help you develop the vision. From this, we will propose the goals, objectives, action, and metrics to evaluate the UFP. A draft UFP will be developed, from which we will incorporate suggested changes into a final plan with an April 2024 target for completion.

Pricing of Services: Fee Schedule

To complete the proposed scope of service, we have developed an all inclusive budget. This includes our time, travel, and other expenses needed to complete the work. Thus, we propose to complete the work for $88,640 for an inclusive base fee. We have also proposed completing a tree inventory for an additional $9532. Appendix E provides further details on the pricing. In total both proposed scopes of work total $98,172

References: Clients

One of the challenges with showcasing experience for a project proposal is selecting which key examples to provide an example of our work to best align with your needs. These examples also provide an idea of our ability to conduct municipal tree inventories, conduct assessments, and develop reports. Further, they provide an example of our ability and expertise with benchmarking municipal forestry programs at local, state, and national levels.

We provide a list of three Florida specific references (Appendix B). In addition, we showcase a sample of work throughout the United States. We selected these examples of clients to contact and to get a sense of our abilities to successfully complete the scope of work. to inquire regarding the qualifications of the consultant.

Exhibit 2. Project schedule for the urban forestry management plan.

Plan Component	Nov	Dec	Jan	Feb	Mar	Apr
RFP Response and Review	●	●				
Kickoff Meeting		●	●			
Project Update Check-ins			●	●	●	●
Community Engagement			●	●	●	
State of the Urban Forest			●	●	●	
Vision, Goals, and Metrics			●	●	●	
Implementation Strategy				●	●	
Develop Draft UFP				●	●	
Revise Final UFP					●	●
Final UFP Presentation						●

Additional Proposed Service: Tree Inventory Project & Approach

Our proposed GIS-based tree inventory will provide critical information detailing tree species composition and distribution, their condition and maintenance needs, and associated site parameters. We have developed a budget to complete both the UFP and a tree inventory within your budget. Using the collected data, an assessment will easily lead into the UFP with results and recommendations to develop action and prioritized recommendations. Ideas include scheduling tree maintenance activities, project planting needs, identifying tree canopy projections, and ultimately increasing human comfort for Opa-locka residents and visitors. In addition, urban forest value is quantified, helping to understand the benefits that the trees provide, and providing the community a sense of pride with their trees and associated value.

COMMUNICATION PLAN

Communication is a key aspect to ensuring a successful collaboration. Upon contract award, a kickoff meeting will be scheduled between key staff to review the project scope, goals, inventory methodologies, and timeline. While this meeting can initially be held virtually, a second in-person meeting can be held when the inventory staff is assembled in your community, to finalize remaining details to create a vital connection with City project management.



Throughout the inventory, weekly updates will be provided to City staff with information on progress, any impediments encountered, proposed solutions, and any project aspects needing clarification. Additional communication may occur as necessary, via email, phone, or text, as City staff prefers, to ensure collaborative completion of data collection. We find this transparent approach is vital to project success and correct any issues that may arise.

TREE INVENTORY

For this project, trees, stumps, and vacant planting sites (e.g., where a tree previously existed or potential location) within the publicly owned rights-of-way and properties will be inventoried. Any existing tree inventory information for Opa-locka or neighboring communities will be an initial start for developing a new tree inventory. For example, knowledge of existing and anticipated tree species is vital to preplan and train for field work for identification and potential pests, maintenance issues, and other factors unique to Opa-locka. Example data to be collected includes details in Exhibit 3. A complete list of the collected tree inventory data will follow those specified in the RFP.

Exhibit 3. Tree parameters and associated values.

- **GPS Location**: unique GPS Coordinate ID
- **Street Address**: Consist with Parcel Data
- **Relative Location**: Consist with Parcel Data
- **Species**: common and scientific Latin name, referencing the i-Tree species list
- **Size (DBH)**: measured at 4.5’ above ground, nearest 1”

- **Condition Rating**: Propose CTLA 5% increments allows allocation into desired future system(s) such as i-Tree
- **Risk Level**: TRAQ based on the likelihood of failure, likelihood of impact, and consequences
- **Arborist Maintenance Requirements**: Specific pruning and removal action, finalized before data collection starts
- **Comments:** Additional information to guide tree management

Data Collection Approach

Our inventory arborists will be supplied with an iPad equipped with integrated GPS, as well as a forester's d-tape to measure each tree's DBH. Inventory data will be collected in the FieldNote tree inventory software produced by Terra Spectrum Technologies, which is a sister company of CNUC (terraspectrumtechnologies.com/fieldnote).



Data will be returned to the City in Shapefile, Geodatabase (.gdb), and csv formats. All collected tree inventory data will be provided to the City and will be considered the property of the City.

While performing tree inventory fieldwork, CNUC personnel will display proper identification: logoed clothing, personal protective equipment (PPE), and company ID badges. Safety is our number one core value, and all field personnel will be equipped with and required to use proper PPE including, but not limited to Class 2 reflective and logoed safety vests, safety glasses, and other appropriate safety equipment and attire required by local or state requirements.

Quality Assurance & Control

Quality work is holistic, beginning by having competent arborists in the field. Our reputation and extensive contacts in the industry provide an excellent opportunity to obtain highly qualified employees. We prefer to hire well-educated employees with a solid foundation in forestry principles (e.g., B.S. to Ph.D. trained in arboriculture, urban forestry, and related fields). As such, we look to hire employees with a degree in forestry or a related field, and with arborist certification by the International Society of Arboriculture.

Staff working on this project are trained both prior to the project and on-site to ensure accuracy and consistency in tree assessment, field measurements, data recording, species identification, and the use of the tools and technology applied to the project. Additionally, each staff member will be observed in the field while collecting data at the onset of the project and will be provided guidance and further training, as necessary to meet our Quality Assurance (QA) requirements. Supervisors who hold the ISA CA credential will conduct on-site

training, initial staff observations, remote and on-site data checks, and periodic field of work.

We welcome and encourage City staff to periodically perform on-site verification of collected data. CNUC staff will cooperate fully with City staff to achieve a high level of confidence in the accuracy of the data. CNUC assures that if any errant tree site location is detected, it is our responsibility to correct the data promptly.

Inventory Schedule

Our fieldwork can begin soon after being awarded a contract and be completed within the requested time. We would begin with a virtual introductory kickoff meeting upon contract reward, at which time we would create connections between the City and CNUC project teams, determine a protocol for proceeding with the inventory, and discuss any timeline and data collection expectations (Exhibit 4). Depending on the required inventory data fields and the time required to acquire GIS data from the City, it is

anticipated that fieldwork will take 6 to 7 weeks to complete with three to four inventory arborists collecting the data. The site project manager will hold the ISA Certified Arborist (CA) credential, and likely all staff will hold the ISA CA. Routine update meetings would continue throughout the project duration, either weekly, monthly, or on an as needed basis; the frequency of meetings can also adapt to the current project demands. If awarded, we anticipate completing an inventory by March 2024.

Quality control of the inventory data will occur throughout data collection. Progress towards meeting project goals will occur during the project. Delivery of the quality-controlled data set will occur within the requested scope of work period.

Goals: The goal setting process will gather broad input from the community, including internal and technical stakeholders. Our team will help synthesize this input and support the

Exhibit 4. Proposed inventory project schedule in 2024.

Project Milestone[1]	Anticipated Dates (2024)
Initial Meeting (Virtual)	January (mid)
Pre-Inventory Meeting	January (late)
Collection System	February (early)
Conduct Inventory	February (mid to late)
Final QA Data	March (mid)
[1] Anticipated dates contract finalization dependent	

City in consolidating and prioritizing specific and measurable goals that reflect the priorities of the community. We will work to ensure that the vision, goals, and metrics of success are all parts of a cohesive whole.

Metrics of Success: Like the vision and goals, we believe that the City should be empowered to set their own benchmarks for success, with support from our team. We will use our technical expertise to guide this process more closely and offer independent views on how data can be collected to answer specific questions and provide a system to track reaching identified goals. An example tree planting goal would include developing a scope of tree planting over a time period and tracking the success towards reaching the goal. A 20-factor urban forestry sustainability model would also be proposed for use to track the progress with the UFP.

SUMMARY

The City of Opa-locka enjoys the distinction as taking proactive steps to develop an urban forestry program. Your 2018 recognition as a Tree City USA is testament to your urban forestry goals, congratulations! Work to date with tree planting initiatives along with taking the step to hire a staff arborist & urban forester is important towards reaching your equitable urban forestry vision. Trees in the City of Opa-locka's is fitting considering the communities name is

derived from Opatishawockalocka which is an indigenous people's Seminole word, meaning "big island covered with many trees in the swamp". The tree planting and steps taking in 2023 will build upon these past efforts to greater a long-term plan to guide future growth of tree canopy and connect Peoples of today and the past!



The City of Opa-locka is taking an important step in urban forest planning to understand what you have (**tree inventory & assessment**), develop an idea of what you want (**stakeholder engagement**), and using an innovative urban forest plan (**action based**) to improve the community (**future growth**) with a resulting equitable tree canopy. Our plan will collect public tree data and help make informed decisions for all lands (public and private) through our proposed Urban Forestry Plan (UFP) proposal.

The trees that line streets and shade the public parks are not only appealing to the eye, but they also provide numerous benefits to residents and visitors. While beautiful and valuable, trees are living organisms which are injured, develop defects, and die, posing a risk as their likelihood of failure increases. Proactively assessing tree needs and tree maintenance is important to promote safety and urban forest growth to fully realize present and future tree benefits.

Our proposed plan addresses the tree inventory and UFP with sections devoted to our solution for each. We first will address the data collection process and our approach to keeping you informed as we collect, and quality assure the collected information is within industry standards. As a company, we are reviewers, developers, and voting members of the A300 tree care standards and ISA Best Management Practices, which sets us apart with expertise.

Next, we will address our approach to take your data and integrating it into your GIS system. We always work closely with a community before, during, and after data is collected with quality assurance and a final dataset best meets your needs and make sure it is in a format you want.

Finally, we address our approach to crafting an UFP that takes your current situation and makes recommendations based on community engagement. We know well how to develop relevant tree-based reports. We created industry benchmarking standards for municipal and utility systems. And as authors of textbooks used to teach and train people to understand urban tree populations, we also know the subject well.

We thank you for your review of our qualifications. We also wish you the best with selection of a firm that best meets your needs. We would like to be the group to work with you!

Appendix A – References

One of the challenges with showcasing experience for a project proposal is selecting key examples to provide an example of our work. These examples also provide an idea of our ability to conduct municipal tree inventories, conduct assessments, and develop reports. Further, they provide an example of our ability and expertise with benchmarking municipal forestry programs at local, state, and national levels.

CLIENT NAME	PROJECT DESCRIPTION AND STAFF	CLIENT PROJECT MANAGER
University of Florida **2018 – Present**	**University of Florida Trees, Storms, Tree Canopy Assessment and Ordinance Development:** These multi projects involved the development of urban forest management strategies to develop resilient urban forests against storms and development pressures. The outcome were technical and academic work the created methods for communities to adopt to develop healthier, sustainable, and equitable urban forests	**Andrew Koeser** Associate Professor Of Environmental Horticulture (813) 419-6589 akoeser@ufl.edu
Florida Power and Light **2016 – Present**	**Storm Mitigation in Response to Hurricanes:** A continued response project providing a to FPL in response to storms. Dispatch crews for emergency response assistance to help with evaluation and organization for storm response.	**Steve Jolly** System Forester (561) 713-4624 Brady.Yip@nexteraenergy.com
Florida Chapter ISA **2022 – Present**	**Technical Presentations:** Provided technical presentations on the growing of urban tree populations. Presentations included developing an urban forest that uses our senses and places to create an ideal state of the urban forest. Upcoming presentations in 2024 include crafting A300 Tree Care Standards of Practice to educate practitioners on the proper approaches for the care of tree populations forest	**Norm Easy** Executive Director Emeritus Phone: (941) 342-0153
City of Sioux Falls, SD, Parks & Recreation, Forestry Division **2021 – Present**	**Tree Inventory and Maintenance Assessment:** This project includes a multi-year tree inventory and projected scope up to 75,000 trees. We are invited back for the second year of the inventory with excellent feedback for staff expertise and data quality control The inventory includes tree height, tree diameter, tree condition, site parameters, GPS location, management recommendation, and other notable field observations in City owned golf courses, parks, and along streets.	**Bryan Peterson** Urban Forestry Specialist (605) 367-8222 bpeterson@siouxfalls.org

CLIENT NAME	PROJECT DESCRIPTION AND STAFF	CLIENT PROJECT MANAGER
City of River Falls, WI **2023 – Present**	**Ash Tree Inventory/Assessment and Emerald Ash Borer Management Recommendations:** This project involved a leaf-off assessment of the community ash tree population and assessment of tree suitability for treatment. A novel assessment was developed to rank trees based on state of EAB infestation, tree condition, site limitations, and other factors to rank trees from highest value to retain and to identify lower value trees that removal might be the better option.	**Mike Noreen** Conservation & Efficiency Coordinator/City Forester (715) 426-3467 mnoreen@rfcity.org
State of Wisconsin, Urban and Community Forestry Program **2018 – Present**	**State of the Urban and Community Forest, Tree Canopy Assessments, and Urban Forest Inventory/Assessments and Management Plans:** We investigated local U&CF capacity and outcomes to baseline & benchmark municipal urban forestry programs in Wisconsin since 1991. In our recent 2018 work, a total of 454 communities were assessed with recommendations created regarding urban forest management and urban forest management plans. More recently, we have been developing estimates of tree canopy throughout Wisconsin communities, assessing over 400 communities, testing AI systems and benchmarking this against human derived assessments. Most recently, we are completing tree inventory assessments of community tree populations in five communities and will develop a State of the Urban Forest that leads to recommendations for the urban forest management & operations.	**Laura Buntrock** Urban Forestry Policy & Partner Specialist State of Wisconsin Urban & Community Forestry Program (608) 294-0253 laura.buntrock@wisconsin.gov
TREE Fund **2014 – 2016** **2023 – present**	**Municipal Tree Care Operations:** This project created a national reference for municipal tree care in the United States. We addressed staffing, budgets, ordinances, community engagement, tree inventory systems, operations, and other details. The work can be found at Municipal Tree Care and Management in the United States: A 2014 Urban and Community Forestry Census of Tree Activities . We are in the process to update this work in 2024	**Heath Hupke** Grants and Development Manager TREE Fund (630) 369-8300 hhupke@treefund.org

Appendix B – Skills and Abilities of Staff

Combined Roles Through our Knowledge, Skills, and Abilities Assessment of the Project Team. Our experience is extensive in several ways, and we have skill sets that both complement each other's and provide many hands to complete a specific task.

Critical Project Topical Areas	Critical Project Areas[1]			Project Team Member Knowledge, Skills, and Abilities Assessment					
	CE	SUF	UFP	Paola	Luke	Daryl	Rich	Sarah	Total
Arboriculture		🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳
Authentic and genuine nice people	🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳
Budgeting			🌳				🌳		🌳
Canopy goal development	🌳		🌳				🌳	🌳	🌳
Community & stakeholder engagement	🌳		🌳				🌳		🌳
Data analytics	🌳	🌳	🌳				🌳	🌳	🌳
Ecosystem benefits & assessment	🌳	🌳	🌳				🌳	🌳	🌳
Emerald Ash Borer Planning		🌳	🌳	🌳			🌳	🌳	🌳
Equity centered metrics and planning	🌳		🌳				🌳	🌳	🌳
Forest health		🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳
Geospatial (GIS & GPS)		🌳	🌳	🌳	🌳	🌳		🌳	🌳
Has a dog						🌳	🌳	🌳	🌳
Project management	🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳
Stakeholder meetings and facilitation	🌳		🌳				🌳	🌳	🌳
Tree assessment & inventories		🌳	🌳			🌳	🌳	🌳	🌳
Tree canopy assessment		🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳
Tree maintenance planning			🌳	🌳			🌳	🌳	🌳
Tree planting and establishment			🌳				🌳		🌳
Tree risk assessment		🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳
Tree selection		🌳	🌳			🌳	🌳	🌳	🌳
Trees and environmental impact			🌳			🌳	🌳	🌳	🌳
Urban forest planning		🌳	🌳	🌳			🌳	🌳	🌳
Urban forest science and BMPs		🌳	🌳	🌳	🌳	🌳	🌳	🌳	🌳
Urban forestry governance	🌳		🌳				🌳		🌳
Vision development & facilitation	🌳		🌳				🌳	🌳	🌳

[1]Notes | CE - Community Engagement | SUF - State of the Urban Forest | UFP - Urban Forest Plan

Appendix C – Proposer Qualifications for Scope of Services to Complete

PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: CN Utility Consulting, Inc.

   Address: 5930 Grand Ave, West Des Moines, IA

   City, State, Zip: 50266 Phone/Fax: (844) 764-2682

2. Check One: Corporation (X) Partnership ( ) Individual ( )

3. If Corporation, state:
   Date of Incorporation: 2/20/2007 State in which Incorporated: Iowa

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:
   2/20/2007

5. | **Name and Title of Principal Officers** | **Date Elected:** |
   |---|---|
   | Austin Kennedy – CEO & Secretary | 10/1/2023 |
   | Jonathan Hicks – SVP, CFO & Treasurer | 10/18/2022 |
   | Derek Vannice – President & COO | 8/1/2017 |
   | Josh Beaver - SVP | 10/18/2022 |

6. The length of time in business: 24 years

7. The length of time (continuous) in business as a service organization in Florida:
   24 years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months. Orlanda Public Utilities (Vegetation Management), Florida Power & Light (Vegetation Management), Florida Chapter ISA (conference presenter), University of Florida (Urban Forestry Projects Collaboration)

9. A copy of County and/or Municipal Occupational License(s) We do not currently have a license for the City of Opa-locka but will apply for one upon award (or before). We do have authority to work in Florida and have existing work in the state.

Note: *Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

I. SCOPE OF SERVICES

The City is looking to move forward quickly upon contract execution with the selected Consultant to meet the targeted project milestones. The selected Consultant is expected to provide the deliverables and to facilitate or participate in all tasks that list the Consultant as the responsible party. Each task should be costed separately for the project team to decide what can be achieved with the budget. If it makes sense to combine tasks, they can be combined if the objectives are still met. Proposers may include additional, optional tasks that they feel should be included in the project to achieve the optimal outcome; however, these costs and hours must be listed separately in the budget and may not be approved.

Please note that this project has a not to exceed budget of $100,000.00 including but not limited to additional services and tasks the Consultant may propose as optional tasks.

Notwithstanding the inclusion of services in this RFP, the final scope of services negotiated between the City and the successful Proposer shall be set forth in the Professional Services Agreement ("Agreement") executed by and between the City and the successful Proposer.

1. Project Management

A. Coordination and Meetings. The selected Consultant's Project Manager will take the lead in coordinating all project activities, including coordinating with City of Opa-locka Project Manager, deliverables, submissions, permits, and similar coordination efforts consistent with the scope of services.

1. The Consultant shall develop a plan for regular meetings with City staff throughout the duration of the project as required to coordinate and execute the scope of services. The Consultant shall prepare and circulate meeting minutes from all coordinating meetings.
2. The Consultant shall develop a plan and schedule to conduct and present at public outreach meetings (using various forms of virtual platforms) to solicit input from, promote the project to, and garner support for the project by the public.
3. The Consultant shall present draft and final plan documents at relevant City Board and Commission and City Council meetings and support the Plan's adoption by City Council.

B. Project Schedule. The Consultant shall prepare and periodically update a project schedule with tasks and milestones. The Consultant shall break down the schedule by logical tasks with enough detail to track project progress. The schedule must reflect realistic review periods for tasks, such as reports, plans, and coordination.

C. Administration

1. The Consultant shall submit a consolidated monthly invoice that includes a
2. progress report reflecting the work completed with the invoice.
3. The Consultant shall maintain project files in accordance with its Work Plan.

D. Work Plan. The Consultant shall prepare a Work Plan, based on the agreed upon Scope of Work, that includes a list of deliverables, milestone submittal schedule, summary of organization responsibilities and contacts, and task budgets. The Work Plan shall be submitted to the City and approved prior to the first invoice.

2. Analysis of Current Status, Challenges and Opportunities

As part of the development of the Urban Forest Plan, the consultant will review all relevant material, including City policies and documents, to identify where the City is successfully meeting program goals, and where there are gaps and areas for recommended improvements.

A. Assess City Policies and Documents. The Consultant shall review and assess all relevant material listed in this section.

1. Community Development Master Plan
2. Municipal Code (e.g., Protection of Trees, Trees and Shrubbery, Landscaping, Preservation of Historical and Cultural Resources).
3. City Guidelines, Specifications and Standards (e.g., Street Design, Planning Permits, Greenstreet Guidelines, Neighborhood Design Guidelines, Tree Removal/Pruning Permits, Landmark Trees, Master Tree List, Parking Lot Shade Guidelines, Street Tree Planting Requirements, City Landscape and Tree Maintenance Specifications)
4. Climate Action and Resiliency Plan
5. Contractor technical specifications for public tree maintenance.
6. Maintenance and level of service for trees in city easements
7. Key Parties and Stakeholders (interviews required)
    a) City Council and Advisory Commissions
    b) City Staff and Other Public Agencies
    c) Non-Profit Groups
    d) Residents and Business Owners
    e) Others
8. Summarize current and future challenges and opportunities in terms of City policies and planning. Who manages/ interacts with trees in City of Opa-locka? What conflicts exist between public agencies/departments/residents with respect to tree management? What opportunities exist for improving city policies, procedures, and plans related to public and private trees?

B. Assess Program Structure, Function, and Budget

1. Current staffing and program resources/staffing/roles and responsibilities (e.g., in-house, tree maintenance contract)
2. Work conducted (i.e., planting, young tree care, mature tree care, hazard tree abatement, administration, special projects (e.g., removal/replacement programs, major corridor tree/landscape improvements), backlog of work, emergency response, levels of interdepartmental coordination, etc.
3. Budget allocated and current level of service.

C. Assess Current City Public Tree Resources (Streets, Easements, Open Space, and Parks)

1. Tree numbers and stocking levels (from existing inventory)
2. Species composition and age diversity (from existing inventory)
3. Species fitness for future climate and growing conditions (pests, drought, etc.)
4. Management needs

5. Current value – resource units and annual monetary benefits, benefit-cost ratios for street and park tree populations
6. Current public opinion – conduct outreach to determine public opinion concerning services provided by the City and preference for alternative future investments.

D. Assess Private and Public Trees Resources (Canopy Cover Analysis)

1. Tree canopy cover and available growing space (area and %) by census tract (for equity assessment)
2. Overall health of the canopy by census tract (if discernible from existing imagery).
3. Identify primary threats to urban forest health citywide.
4. Equity assessment (distribution of canopy cover and its health, as well as available growing space, in relation to socio-economic indicators of need from census tract data.
5. Planting and management needs to be prioritized by census tract.
6. Value-resource units and annual monetary benefits, benefit-cost ratios by census tract if available
7. Current public opinion – conduct outreach to determine public opinion concerning the extent, health and preference for alternative future investments in the City's urban forest canopy.
8. Provide an overall assessment of Opa-locka's existing urban forest ecology using a framework such as Nature Serve's Ecology Integrity Assessment Method, US Forest Service's Forest Landscape Assessment Tool or other appropriate framework.

3. Stakeholder Participation and Outreach

A. Develop and implement an outreach plan that identifies and engages stakeholders. Consultant team should expect to have a multilingual outreach process that supports engagement with a diversity of cultures and ethnic backgrounds.

B. Develop and provide content for project web pages to be uploaded by City staff and hosted on the existing City web site, which will be a resource for project documents.

C. Collect input from stakeholders, including communities that may not be able to participate in web- public comment, pop-up events at farmers markets and other spaces, community presentations, or student ambassadors.

D. Develop media messaging materials and a media outreach strategy to inform the public about the planning process as well as opportunities for residents to be involved in supporting the health of the urban forest, including planting and properly managing trees on private and public property.

E. Engagement is expected to be ongoing, substantial, and center neighborhoods where priority tree planting will likely occur.

F. The Project Manager can assist in connecting to local partners and community groups, as well as running some of the outreach events/pop-ups.

4. Urban Forest Plan Development

The consultant team will prepare the Urban Forest Plan document with input from City staff to encompass the determinations based on issues identified in the Scope of Work. The consultant team will develop the organization, narrative text, graphic layout, and a complementary web-based document. The Plan will retain and expand to include park trees and develop recommendations to promote an increase in the overall canopy, including trees not managed by the city.

A. Identify principles and key goals for the plan update. Work with the community to develop principles and goals for the updated Plan and the Urban Forest Program. Guiding principles for the plan implementation are outlined in the background. Identify major challenges for Opa-locka in implementing this work. The Consultant team should plan to address social equity in the prioritization of tree planting across neighborhoods and in the outreach process; incorporation of all partners; and acknowledgment in preparation of a future Green Infrastructure Plan.

B. Key performance indicators. Recommend measurable key performance indicators for tracking progress on Plan goals (considering existing city goals), such as tree planting numbers, net tree gain and tree canopy coverage, increased native biodiversity, number of environmental justice priority community events, number of volunteer hours, and others with citywide goals. Propose policies and strategies that support the achievement of these goals.

C. Tree species and management recommendations.

1. The Plan should identify recommended street tree species appropriate for planting in the public right of way and park trees for planting in parks that meet criteria such as drought tolerance, groundwater table, Florida natives, root growth (minimizing impacts to adjacent public sidewalks and private sewer laterals), and height (many of the City's residential neighborhoods still have overhead power lines), and future climatic conditions.
2. Develop a tree species matrix that includes ratings for CO2 storage, air quality benefits in terms of ozone, nitrogen dioxide, particulate matter and sulfur dioxide, shade, habitat, pest risk, and other ratings as appropriate. Include mature examples of each species.
3. Provide the City and stakeholders with guidance and recommendations in regard to the state of urban forestry best practices in the following areas at a minimum:
    a) Tree care & health
    b) Tree monitoring
    c) Tree protection, removal, and mitigation for public and private trees
    d) Integrating urban forestry into land use planning
    e) Water conservation considerations
    f) Tree shade and urban heat island mitigation
    g) Public and private utility conflict mitigation
4. Identify strategies to reduce tree maintenance and sidewalk repair costs and minimize tree/utility conflicts.
5. Outline recommendations for best management practices for declining trees and removal of public trees and outline any proactive mitigation strategies to minimize the need for removals.
6. Outline recommendations for the preservation of existing trees on private property, including requirements for removal.
7. Recommend supplemental tools/policies/practices toward increasing tree planting programs including increasing the use of tree zones with automated irrigation systems within the disadvantaged communities.

D. Recommendations for Staffing Structure, Function, Budget and Revenue for Urban Forest.

1. Based on community input from outreach efforts, what aspects of the City's urban forest program pose the greatest challenges and opportunities? What potential future investments are most and least preferred?

2. Recommend optimal staffing (mix of in-house, contract, other) to improve service and efficiency.
3. Determine a recommended budget for urban forest management to meet the desired level of service and plan goals, including ongoing community engagement.
4. Identify potential sources of revenue or support to increase funding and resources available to the Urban Forest.
5. Evaluate the current tree maintenance contract and specifications and make recommendations to align with the overall goals of the Urban Forest Plan and recommended staffing and programmatic needs.
6. Provide a comprehensive list of all applicable resources with the required competencies including staffing, tools, and software.
7. Recommended urban forest management strategies applying but not limited to the following: Reliability Centered Management, Just In Time, Optimal Prune Cycle and address Cost of Deferring Maintenance, Tree Growth Analysis, Pest Pressure and Loads and Other Environmental factors such drought, poor soil conditions and pathogen loads.

E. Challenges for maintaining a healthy urban forest. Climate change, rising groundwater, drought, and potential challenges to maintaining a healthy and vibrant urban forest. The plan should identify these and other challenges and suggest creative solutions to address identified challenges.

F. Recommendation for ongoing community input on urban forest management. Tree planting and care will not be a City endeavor alone – it will require the participation and investment of the community and partners. We want to build community leadership around tree caretaking. Recommendations may address:

1. Recommended actions regarding partnerships, outreach, programming, and community events. This can include Tree Care Academy, best outreach/communication practices, demonstration projects, and volunteer tree planting programs in public areas and Arbor Day/tree festival/community planting days.
2. Recommendations to educate residents about the urban forest, how it supports the city' climate mitigation and adaptation goals and how residents can be involved in supporting the urban forest, including information on what residents are allowed or required to do with public trees.
3. Strategies to encourage and assist residents, businesses, and private property owners to plant and properly maintain trees on their own property (including provision of free or rebated trees and MDC or City rebates).
4. With limited staff capacity at the City, a tree planting and maintenance program will need to be supplemented and supported by a community network. Identify some possible collaboration structures for staff, community volunteers, horticulture students, community partners, and organizations to work together on the tree planting program.
5. Possible partnerships with local businesses and nurseries to further support the community.
6. Recommendations on applicable community engagement resources, including staffing, tools and software.

G. Changes to City policies and related plans. Identify any recommended changes to current City policies, planning, and documents based on assessment of current policies and plans. Identify any areas that might be subject to improvements.

H. Inventory. Provide recommendations on expanding the City's tree inventory to include all city trees.

I. Plan evaluation and updates. Provide recommendations for the ongoing evaluation of the effectiveness of the Plan and guidance for the timing and process of updating the Plan.

Appendix D – Disclosures and Scope Redactions and Additions

No redactions or additions are proposed.

Appendix E – PRICE PROPOSAL FORM AND ADDITIONAL AGREEMENTS

The proposed plan to complete the scope of work will include at least two travelling field inventory specialists and a project supervisor for quality control. These staff hold the ISA Certified Arborist credential. Project management oversight and technical detail expertise will also occur through an ISA Board Master Certified Arborist.

PRICE PROPOSAL FORM

PROPONENT understands and agrees that the Contract Price is the lump sum to furnish and install all of the Work complete in place. Vendor's price will not be adjusted unless the CITY changes the scope of the Project after the Contract Date.

As such, the Vendor shall furnish all labor, materials, equipment, tools, superintendence, and services necessary to provide a complete, in place Project for the Proposed Price of:

LUMP SUM PRICE: $ 88,640 for the Urban Forest Plan (UFP)
$ 9,532 for a Public Tree Inventory (Add-on Scope of Work)
$98,172 for both the UFP and Tree Inventory

SUBMITTED THIS 28 DAY OF November 2023.

BID SUBMITTED BY:

CN Utility Consulting	(844) 764-2682
Company	Telephone Number
Josh Beaver	(515) 398-0010
Josh Beaver Name of Person Authorized to Submit Bid	Fax Number
Signature	jbeaver@cnutility.com Email Address
Senior Vice-President	
Title	

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non- responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature 

Printed Name Josh Beaver

CITY OF OPA-LOCKA
DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Josh Beaver (Name) the Senior Vice-president (Title/Position) of CN Utility Consulting (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

November 28, 2023
Date

Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

Josh Beaver being first duly sworn, deposes and says that:

(1) He/She/They is/are the Officer (Owner, Partner, Officer, Representative or Agent) of CN Utility Consulting, Inc. the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Laura Hayes - Contract Administrator
Witness

Witness

By: Josh Beaver
Signature

Josh Beaver - Senior Vice President
Print Name and Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: Josh Beaver

Title: Senior Vice President

Sworn and subscribed before this

28 day of November, 2023

Notary Public, State of Florida

(Printed Name)

My commission expires:

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

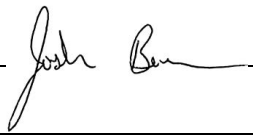
Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: CN Utility Consulting, Inc.

Authorized Signature: 

Print Name: Josh Beaver

Title: Senior Vice President, CNUC

Date: November 28, 2023

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/29/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		CONTACT NAME:	Kelly Grunerud or Brandon Ferguson	
Brown & Brown Inc. 80 South 8th Street Suite 700 Minneapolis, MN 55402	1-612-333-3323	PHONE (A/C, No, Ext):	612-333-3323	FAX (A/C, No): 612-373-7270
		E-MAIL ADDRESS:	brandon.ferguson@bbrown.com	
		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A :	OLD REPUBLIC INS CO	24147
INSURED CN Utility Consulting, Inc. PO Box 1718 Des Moines, IA 50306		INSURER B :	NATIONAL FIRE & MARINE INS CO	20079
		INSURER C :	QBE SPECIALTY INS CO	11515
		INSURER D :	MT HAWLEY INS CO	37974
		INSURER E :	EVANSTON INS CO	35378
		INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** 68236207 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			MWZY31123523 (AOS EXCL CA)	04/01/23	04/01/24	EACH OCCURRENCE	$ 5,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
	X SIR $100,000						MED EXP (Any one person)	$ 15,000
	X GEN-AGG CAP $10M						PERSONAL & ADV INJURY	$ 5,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 5,000,000
	X POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 5,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY			MWTB31123623	04/01/23	04/01/24	COMBINED SINGLE LIMIT (Ea accident)	$ 5,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
B	X UMBRELLA LIAB X OCCUR			42UMO31445603	04/01/23	04/01/24	EACH OCCURRENCE	$ 2,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 2,000,000
	DED X RETENTION $ 25,000							$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N	N / A		MWC31123423	04/01/23	04/01/24	X PER STATUTE OTH-ER	
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH)						E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
C	EXCESS LIABILITY			140001001	04/01/23	04/01/24	LIMIT	3,000,000
D	1ST LAYER EXCESS			MXL0435103	04/01/23	04/01/24	LIMIT	5,000,000
E	Professional Liability			MKLV1PEO002443	10/01/22	10/01/23	Each Claim/Agg	5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

(General Liability: Per Project Agg Limit applies when required by written contract)

CERTIFICATE HOLDER

Evidence of Insurance

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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CITY OF OPA-LOCKA
DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Josh Beaver (Name) the Senior Vice-president (Title/Position) of CN Utility Consulting (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

November 28, 2023
Date

Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

Josh Beaver being first duly sworn, deposes and says that:

(1) He/She/They is/are the Officer (Owner, Partner, Officer, Representative or Agent) of CN Utility Consulting, Inc. the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Laura Hayes - Contract Administrator
Witness

Witness

By: Josh Beaver
Signature

Josh Beaver - Senior Vice President
Print Name and Title

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non- responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

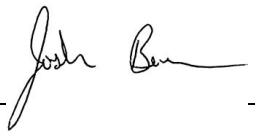
AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature 

Printed Name Josh Beaver

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: Josh Beaver 

Title: Senior Vice President

Sworn and subscribed before this

28 day of November, 2023

_____
Notary Public, State of Florida

_____
(Printed Name)

My commission expires:_____

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

CN UTILITY CONSULTING, INC.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☑ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

PO BOX 818

Requester's name and address (optional)

6 City, state, and ZIP code

DES MOINES, IA 50304

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–		–				

or

Employer identification number

2	0	–	8	5	1	4	0	5	6

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person ▶** [signature] ASSISTANT CONTROLLER **Date ▶** 07/01/2020

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

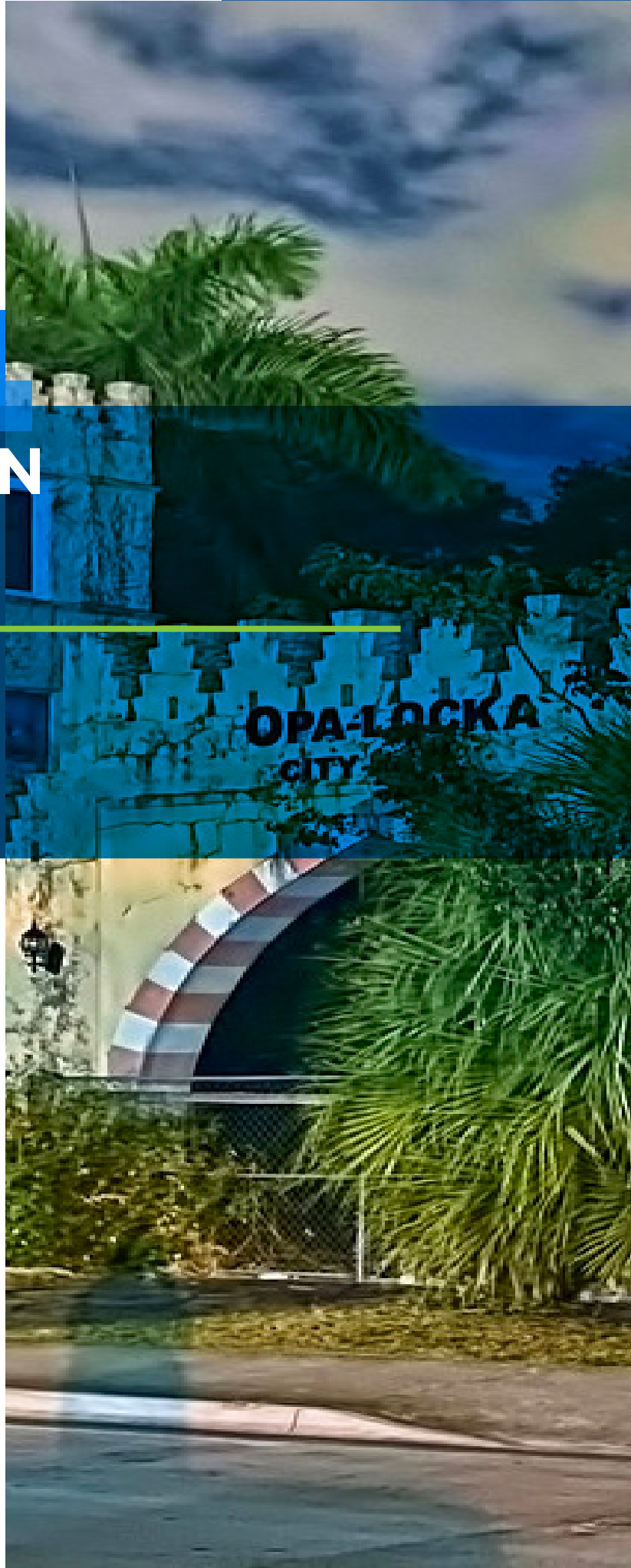
If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

PROPOSAL FOR: RFP 23-1128200

CITYWIDE URBAN FOREST PLAN

City of Opa-locka, FL

November 28, 2023



SUBMITTED TO:
City of Opa-locka, FL
Office of the City Clerk
780 Fisherman St, 4th Floor
Opa-locka, FL 33054

PROPOSED BY:
PlanIT Geo, Inc.
P.O. Box 1334
Wheat Ridge, CO 80034
carrieasselmeier@planitgeo.com
(303) 214-5067

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PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: PlanIT Geo, Inc.

   Address: P.O. Box 1334

   City, State, Zip: Wheat Ridge, CO 80003 Phone/Fax: 303-214-5067

2. Check One: Corporation (X) Partnership ( ) Individual ( )

3. If Corporation, state:
   Date of Incorporation: 9/1/2021 State in which Incorporated: Colorado

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:
   6/23/2023

5. **Name and Title of Principal Officers** **Date Elected:**

Ian Hanou	1/12/2012 (LLC) and 9/1/2021 (Corp)

6. The length of time in business: 11 years

7. The length of time (continuous) in business as a service organization in Florida:
   9 years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

PlanIT Geo
developers of TreePlotter

P.O. Box 1334
Wheat Ridge, CO 80034
sales@planitgeo.com | 866.256.1787
www.planitgeo.com

City of Opa-locka, FL
Office of the City Clerk
780 Fisherman St, 4th Floor
Opa-locka, FL 33054

Dear Evaluation Committee,

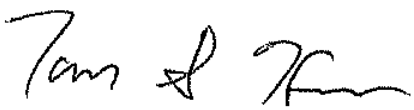
PlanIT Geo, Inc is pleased to submit our qualifications in response to the City of Opa-locka's request to provide a comprehensive Urban Forest Plan. We believe we are fully equipped, qualified, and prepared with ample time and resources to provide the City of Opa-locka with an informational, professional, and actionable project. PlanIT Geo exceeds the minimum qualifications for this project, having multiple ISA certified arborists, over 9 years experience having completed over 50 urban forestry plans, and are registered in Florida to do business. We look forward to this collaborative opportunity to work with the City on this important project.

PlanIT Geo is organized into four unique departments to provide specialized services: Software, GIS, Inventory, and Consulting. Each department contributes to different aspects of urban forestry projects when developing Urban Forestry Plans, tree ordinances, city tree inventories, tree canopy analyses, tree planting strategies, and other projects relating to trees in our communities. Just as the City of Opa-locka values the urban forest as the key to a healthy city, our team is driven to provide products and services that enhance and sustain it. We are committed to achieving the goals set forth in the City's RFP to develop a comprehensive and integrated Urban Forest Plan to help the City in being proactive in their urban forestry efforts.

Our team brings over 10 years experience and extensive knowledge in regional urban forest management planning, public outreach and engagement, programming, operations/policy auditing and guidance, tree inventories, risk assessments, tree preservation, canopy assessments, forestry recommendations, pest and disease management, and planting strategies. Our experience and dedicated team will provide accurate, clean, and manageable urban forest data through proven urban forestry processes and practices.

We will develop meaningful and actionable data to promote urban forest sustainability. Together, we will develop sound and project-specific data for the City to properly manage, budget for, and provide proactive maintenance on its tree assets. This project will enable the City to facilitate an urban forest that is healthy, safe, sustainable, and equitable for the future. We understand that a robust urban forestry program can only thrive with accurate data, effective planning, and the support and participation from the community. Our proposed approach consists of landcover and equity analyses, extensive public engagement, internal stakeholder interviews, research, program and structure assessment, and identification of challenges and recommendations. On behalf of the PlanIT Geo team, we are pleased to have this opportunity to submit our qualifications and approach. If you have any questions regarding our submittal, please feel free to call the Proposal Coordinator at the number listed below.

Respectfully submitted by,



Ian S. Hanou
CEO/Founder
PlanIT Geo, Inc.
ianhanou@planitgeo.com
(303) 503-4846

Prepared by Primary Contact,



Carrie Asselmeier
Proposal Coordinator
PlanIT Geo, Inc.
carrieasselmeier@planitgeo.com
(630) 333-5176

CITY OF OPA-LOCKA, FL | URBAN FOREST PLAN NOVEMBER 2023 1

SECTION 1
PROJECT APPROACH

PROJECT UNDERSTANDING

The City of Opa-locka has a population of approximately 16,000 residents, covers approximately 5 square miles, and has a history of valuing its trees as a critical asset of Opa-locka's overall sustainability. Opa-locka considers its trees as a defining characteristic of the City, recognizing the myriad benefits and sense of place they provide. The City seeks to transform its street tree plan to become it's first Urban Forest Plan. The City's strategic plan is to update the City's existing street tree plan and expand the scope to include park trees, trees in easement areas, trees near power lines, and trees on private and other non-City of Opa-locka owned property. Strategic management of the City's trees will support these priorities by providing climate impact mitigation, strategic management, and benefits that are maximized equitably for the long-term for all residents of Opa-locka. The goal of the Urban Forest Plan or UFP is to create a comprehensive, equitable, sustainable, and integrated approach to urban and community forest management on both public and private property while aligning with the City's other important plans and opportunities for community equity.

Due to the desire to protect and manage the City's urban forest, the City of Opa-locka has placed priority on expanding the urban forest and creating a more equal distribution of trees across all the City of Opa-locka's neighborhood. Opa-locka seamlessly integrates City plans with public input and opportunities for the City's future while being committed to a beautiful, sustainable, and healthy environment. The City desires a Urban Forest Plan to address issues related to environmental justice, tree species, policies and procedures, and climate change in conjunction with sustainable forest management. The UFP will be strategic in advancing social equity and contribute to an improved quality of life by providing the benefits of urban tree canopy to all community members. This document will align with existing City plans and other community plans and documents, establish a centralized vision and focus for specific long-term goals and actions, provide insight into the community for continued education and engagement in tree maintenance and preservation for property owners, and continue to manage public and private interest in trees located in the City's urban forest. The planning process will include coordination with City staff and stakeholders to ensure goals and strategies in the UFP do not conflict with City policies and codes but rather support and complement Citywide goals and policies outlined in existing policies, plans and codes. Effective urban forest planning requires accurate and actionable information, including an understanding of current conditions, City, stakeholder, and forestry needs before significant management actions and planning initiatives are undertaken. It is our understanding that, in recognition of this fact, the City requires the services of a qualified and experienced community forest management consultancy to successfully create and integrate the City's plans. This project will use the findings from the City's current conditions, the goals and actions of the street tree plan, extensive internal consultations, external stakeholder exercises to gain input, messaging campaigns, and a final UFP.

PlanIT Geo commits to working collaboratively with the City to ensure this important project fulfills all of the City's stated objectives and requirements. With the data, tools, and management plan provided, the City will be emboldened with timely, comprehensive, and accurate information about its urban forest resources, management approaches, and program efficiencies and will be fully ready to take the next step toward a healthy, diverse, and expanding community forest.

KEY CONSIDERATIONS FOR URBAN FORESTRY PLANNING

Cities around the world, and specifically in the north central United States, face dramatically intensifying extreme weather events, climate impacts, and unavoidable pest infestations. Many of these impacts are already exceeding the designed capacity of city infrastructure to protect the health and safety of residents, businesses and neighborhoods, which in turn threatens the fiscal viability of cities and regions. In Opa-locka, these impacts are felt more heavily in some areas due to a significant amount of climatic events resulting from increased climate change impacts and lack of tree canopy coverage. Historically, Opa-locka has a low percentage of tree cover. Even with an existing robust community forest, the City still suffers from degrading ecological quality and inequitable canopy coverage. Due to these facts, the City has placed priority on preserving, restoring, and prioritizing natural areas and trees in order to reduce environmental and health impacts and improve canopy and the ecosystem as a whole. Trees and forested areas in communities can play a significant role in making cities resilient to weather and climate extremes, and in protecting human and ecosystem health and safety. To do so, trees must be consciously selected, planted and managed as the central component of a community forest where individual trees are managed as part of a greater system with the purpose of improving the urban environment and enhancing benefits from those trees and their canopy.

While this Plan will focus on management strategies for trees on public and private properties, the impact will be felt community-wide and achieving a equitable community forest requires a shared commitment from the City, its partners, and its residents. When making improvements to the community forest, efforts should be prioritized to improve environmental justice, equity, access, and levels of service for underserved and vulnerable areas. These considerations may include additional tree plantings for an equitable distribution of canopy cover and benefits, intensive tree management, diverse outreach approaches, cost-share programs, and unique stewardship opportunities.

Opa-locka's Urban Forest Plan is a crucial effort for improving land, air, and water quality, increasing tree canopy and tree diversity, and promoting community resilience and equity. A plan for the community forest will provide the guidance for strategic management, funding, and best practices resulting in long-lasting benefits.

STRATEGY & VISION

Planning and managing the legacy of Opa-locka's community forest, through applied science, best practices, and budget management is achievable with innovative and contemporary approaches. The City's UFP will apply the fundamentals of adaptive management and establish new measurable goals and actionable strategies as recommended by the Consulting Team, stakeholders, and City staff. The Plan will be a comprehensive, yet concise and actionable plan with a clear vision, intended for the City of Opa-locka to approve.

Our strategy to develop the Urban Forest Plan begins with the discussion to finalize the project's scope of work, budgets, and timelines. From there, the Consulting Team will meet with the City project lead to identify project management specifics such as the communications protocols, project teams, milestones, and key considerations. Decisions will be documented in a living work plan and PlanIT Geo's Task Tracker to enable effective communication, planning, and status tracking. To develop the UFP, our Consulting Team has established a project-proven iterative approach consisting of research deep dives, canopy data analyses, internal and external consultations, public outreach and engagement, recommendations development, strategy development, draft plans, presentations, delivery training, and protocols for monitoring and adapting the Plan. Each step in

the process is modular, enabling a continuous feedback loop to ensure the requirements of the deliverables and final Plan are met.

Our vision for Opa-locka's UFP project is to provide an enjoyable project experience that engages all members of the community resulting in strengthened partnerships, increased stewardship and a sustainable community forest that benefits current and future generations.

PROJECT MANAGEMENT AND COORDINATION

PlanIT Geo has carefully reviewed and considered the requirements of this project and all other current and planned projects and has determined that the firm has the capacity to fully commit to this project to meet the required timeline and desired outcomes. PlanIT Geo has never failed to complete comparably-sized and scoped Urban Forest Planning projects to the complete satisfaction of our clients using the staffing capacities and resources outlined in accepted proposals. Any changes in budgets have resulted from mutually-agreed upon changes in project scope which were not originally contemplated in the accepted proposals.

PlanIT Geo is confident in its capacity to complete this project on time, within budget, and as specified in both the City's RFP and in this proposal. In summary, our team is committed to the project in its entirety and will successfully complete the project requirements within the timeline as defined in the project negotiation phase.

Our project team has extensive experience providing local, regional, and statewide forest resources planning throughout the U.S. and within the Florida. We are quality driven, responsive, efficient and cost conscious of client budgets. Our team specializes in public sector work and includes staff that have worked with cities to increase awareness, stewardship, and support from the community and respective boards, commissions, and councils. The team has valuable knowledge of community forestry projects and the need for meaningful and informational public engagement processes.

Team meetings will be held monthly or bi-weekly depending on the City's decision on involvement on the project. Meeting minutes will be taken and shared after every meeting. Plans for public meetings will be put into place with discussion with the City's Project Manager. Draft and final plan documents will be presented at relevant City Board and Commission meetings and the team will support the Plan's adoption by City Council.



SCOPE OF WORK

This Urban Forest Plan project for the City of Opa-locka represents an important step in the better understanding the structure of its community forest, the challenges and opportunities, community viewpoints and priorities, approaches for inter-departmental coordination and efficiencies, and strategies for implementing best practices that support a equitable program. Our team will apply an iterative planning approach consisting of collaboration and interviews with City staff and external stakeholders; community engagement; benchmarking processes for program operations, costs, and coordination; and strategies for increasing and preserving trees and canopy cover. The tools and outcomes will support and update existing plans, invigorate guiding principles and resources, and inform stakeholders on the importance of the community forest.

An Iterative Approach to Apply the Fundamental Planning Process



The project will accomplish the following desired outcomes of a successful Urban Forest Plan:

I. Create a street tree plan expansion and develop recommendations to promote and increase canopy.
II. Develop a dynamic and forward-focused plan and related policies based on the needs of the City.
III. Review the structure and funding of urban forest management.
IV. Review existing conditions related to trees on public property, including structure and composition (derived from canopy analysis), functions and benefits, and issues and opportunities.
V. A public engagement process to identify community values, priorities, and goals related to trees and the community forest.
VI. A review of current forestry efforts, including programs, policies and procedures, staffing and allocated resources to identify gaps.
VII. Integrate with the City's current plans, strategies, and data, specifically the current street tree plan, and provide tools to monitor and assess progress of plan goals.
VIII. Guide climate mitigation strategies and adaptation, public health and well-being, ecological services, and other factors as critical elements of community resilience and equity.
IX. Develop a land cover and tree canopy dataset to assess current public and private tree resources for the City.

To accomplish the Scope of Work in the City's RFP, the steps involved are organized into the following tasks: **Task 1) Project Management; Task 2) Analysis of Current Status, Challenges, & Opportunities, Task 3) Stakeholder Participation & Outreach, and Task 4) Urban Forest Plan Development.**

DETAILED PROJECT TASKS

1) Project Management
A) Coordination & Meetings
B) Project Schedule
C) Administration
D) Work Plan
2) Analysis of Current Status, Challenges & Opportunities
A) Assess City Policies & Documents (+ Virtual Stakeholder Interviews)
B) Assess Program Structure, Function, & Budget
C) Assess Current City Public Tree Resources (+ Public Opinion Outreach)
D) Assess Private & Public Tree Resources (Canopy Analysis)
3) Stakeholder Participation & Outreach
A) Outreach Plan (+ Language Translations, $4k of costs)
B) Web Content
C) Stakeholder Input (non-web)
D) Media Messaging Materials
E) Priority Neighborhoods Engagement
F) Support City Project Manager
4) Urban Forest Plan Development
A) Identify Principles & Key Goals for the Plan Update
B) Key Performance Indicators
C) Tree Species & Management Recommendations
D) Recommendations for Staffing, Structure, Function, Budget & Revenue for Urban Forest
E) Challenges for Maintaining a Healthy Urban Forest
F) Recommendation for Ongoing Community Input on Urban Forest Management
G) Changes to City Policies & Related Plans
H) Inventory (recommendations)
I) Plan Evaluation & Updates
Other) Graphics, Maps, Complementary Web-Based Document

SECTION 1

RELEVANT EXPERIENCE

FIRM EXPERIENCE

PlanIT Geo, Inc is an urban and community forestry consulting and software firm with a mission to map the world's urban forests for a greener future by integrating experience with cutting edge technology and planning for urban forestry, parks, and arboriculture. PlanIT Geo has been in the urban forestry business since its establishment by CEO Ian Hanou on January 11, 2012 in Arvada, CO and has expanded to over 50 employees in 2023. PlanIT Geo has satellite offices all over the country, including but not limited to: Hershey, PA; St Petersburg, FL; Seattle, WA; and Tulsa, OK. PlanIT Geo provides contractual services including tree inventories and risk assessments using TreePlotter™ software, risk tree planning, tree inventory and management software, tree ordinance review, management plans, master plans, community plans, land cover mapping (LiDAR/multispectral imagery), tree canopy assessments, GIS analyses, and i-Tree studies. Over 500 communities, nonprofits, and state/local governments throughout the United States, Canada, and Australia have utilized our team to perform tree inventories, write tailored management plans, and conduct tree canopy assessments.

The PlanIT Geo Team provides customized forestry solutions, resources, and tools to local governments, nonprofits, universities, and private industries that guide these entities to a holistic approach in sustainable forestry and environmental equity. The PlanIT Geo Team has extensive knowledge of urban and community forestry practices in Oregon, having completed projects within the state in the last 3 years. PlanIT Geo has expertise in urban and community forestry management, tree asset management, environmental equity, sustainable solutions, and ecosystem diversity. The entire PlanIT Geo Team has a wide array of skill sets related to urban and community forestry and are committed to serve our clients with the highest quality of products available in the industry.

URBAN FORESTRY CONSULTING

In the past 9 years, PlanIT Geo has managed or continues to manage urban forest management / master / maintenance plan projects with budgets totaling over $2.3 million, engaging over 15,000 community residents, and interviewing 450+ city staff representing over 100 departments. Collectively, over 10.6 million people residing in the study areas will be positively impacted by the 50+ forestry planning projects completed to date. PlanIT Geo has completed urban and community forest management/master plans, pest and disease management plans, maintenance plans, risk tree plans, strategic planting plans, storm response and mitigation plans, and canopy action plans for the public, private, and nonprofit sectors. Chris Peiffer, the Director of Urban Forestry Consulting Services will be the project manager for the UFP project for the City of Opa-locka. The PlanIT Geo Team is ready upon award to begin the project at the anticipated date of April 2023.

KEY PERSONNEL EXPERIENCE

Alex Hancock - Project Manager

Alex is an ISA Certified Arborist with a background in urban planning, urban forestry, and sustainability. She is experienced in tree canopy cover analysis, climate action planning, zoning and land use planning, and public policy. Alex has a Bachelor's of Urban Planning and earned her Master's in Forest Resources and Conservation with a Graduate Certificate in Geospatial Analysis while working full-time as a City Planner.

Her most recent role as Sustainability Coordinator and Certified Arborist for the City of St. Petersburg, FL, Alex focused on programs for climate resilience, clean energy, waste reduction, environmental justice, and urban forestry. She was on a team that developed, published, and is implementing the Integrated Sustainability Action Plan (ISAP), which emphasizes equity as a primary focus of planning for a sustainable and resilient future. As a result of their work, the City was awarded as one of the 25 winning cities in the American Cities Climate Challenge. Alex completed St. Petersburg's first tree canopy analysis, which includes an historical vegetation analysis and ecosystem benefits calculated per City Council district. As a member of her local City Beautiful Commission's Urban Forestry Committee in St. Petersburg, Alex helped to develop a Citizen Forester program and recruited highly talented community members to inventory trees on public and private property.

Since joining the PlanIT Geo team, Alex has been applying these experiences and skill sets to support the development of urban forest management plans for communities. Specifically, she is directing the integration of urban forestry into sustainability planning for communities through public engagement, staff consultations, policy analysis, and plan development.

Andrea Starbird
Andrea is an ISA Certified Arborist and Municipal Specialist with expertise in managing and preserving urban trees as green infrastructure. In her previous roles as a consulting arborist and tree care project manager, Andrea developed deep insight into how land use and environmental regulations are implemented at the parcel level. She has provided expert arborist consulting services to a diverse clientele in both the public and private sectors; working with state and municipal project works and parks departments, university and corporate campuses, and residential customers, and has a keen understanding of stakeholder dynamics.

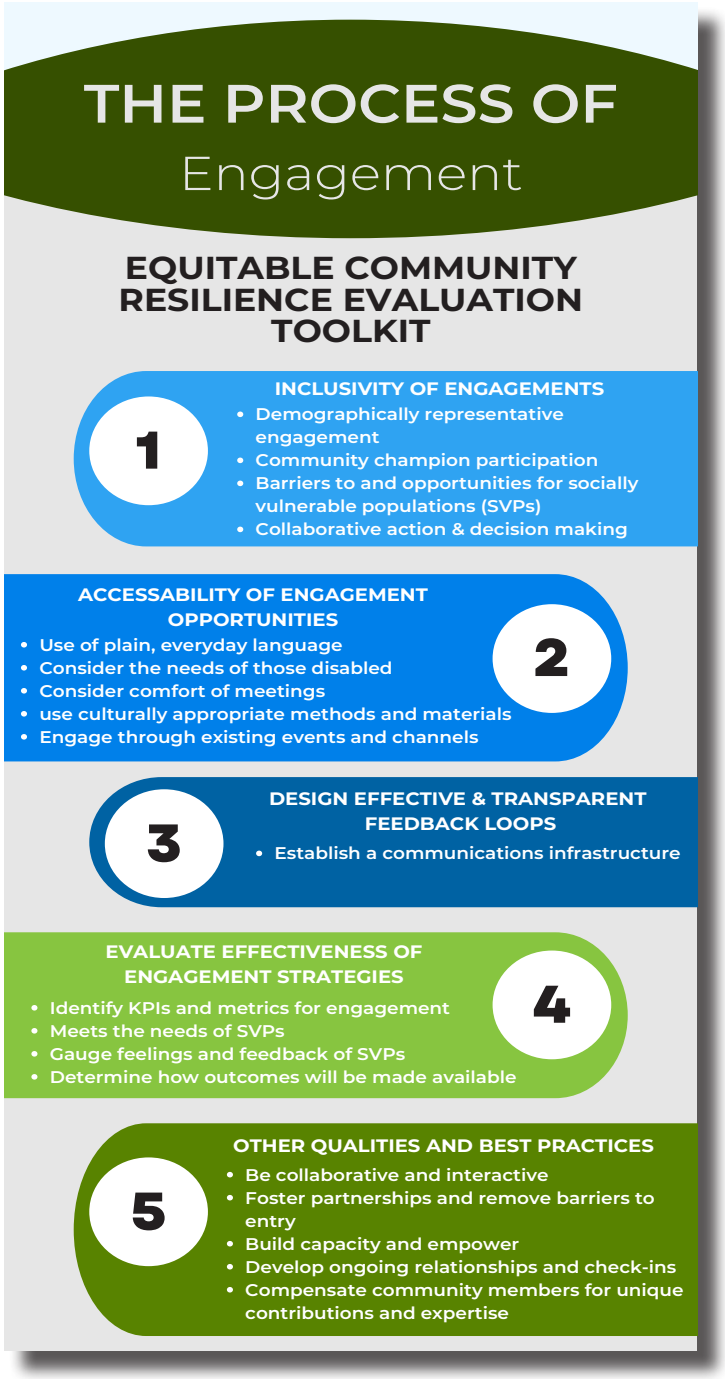
Driven by her commitment to environmental equity, she brings a collaborative, problem-solving approach to ensure policy supports the health and resiliency of our urban forests and the communities that benefit from them. As part of the PlanIT Geo team, she draws on her experience to provide comprehensive ordinance evaluation and meaningful public engagement to support tailored, actionable urban forest management plans.

Logan Johnson
Logan joined PlanIT Geo in June of 2023 as an Urban Forest Planner. He has a diverse professional background that spans arboriculture, urban forestry, and urban sustainability and resilience.
Through his experience as an arborist, and as an ISA Certified Arborist, he brings a breath of experience from arboricultural production operations, plant healthcare, and regenerative soil care. In addition to his arboricultural background, he has experience with Nature-based Solution projects, community and stakeholder engagement, climate action planning, assisting with GIS projects, carbon offsets, and other sustainability and climate problem solving.
Logan supports the Urban Forestry Consulting Services (UFCS) team in data analysis, support in technical writing, project management, and assisting with stakeholder or community engagement. He also supports the PlanIT Geo and the UFCS team in its growth and community and client assistance where needed.

The PlanIT Geo project team has extensive experience in Urban Forest Planning and everything included in creating a robust, actionable, informational, and sustainable plan. The team uses technology such as ArcGIS (Esri) to analyze tree data and Adobe InDesign to create professional looking and readable reports. All team members are ISA certified and are versed in municipal tree care standards, best management practices, sustainable practices, restoration principles and trends, and forestry management practices.

Our team also has experience and interest in climate resilience and environmental justice, including recommendations for both during planning and programming processes for plans such as this one. The team's involvement in public outreach, engagement, and workshops/events extends beyond the scope of this project. The team uses the Equitable Community Resilience Evaluation Toolkit to ensure all engagement and external stakeholder processes are meaningful and inclusive.

The following sections include tools, processes, documents, and experience the team utilizes on every project to project the most valuable outcomes to each specific City.



Standards, BMPs, and Resources Commonly Used:

- American National Standards Institute's (ANSI) A300, Z60.1, Z133, among others
- International Society of Arboriculture (ISA) Best Management Practices
- U.S. Forest Service's Urban Forest Sustainability and Management Audit System
- Vibrant Cities Lab and the Community Assessment & Goal-Setting Tool
- Vibrant Cities Lab's Climate & Health Action Guide (2020)
- A Model of Urban Forest Sustainability (Clark et al. 1997)
- Criteria and Indicators for Strategic Urban Forest Planning and Management (Kenney et al. 2011)
- Guidelines for Developing and Evaluating Tree Ordinances (USFS, 2001)
- Climate Adaptation Workbook (USFS, American Forests, and Northern Institute of Applied Climate Science)
- Climate-Ready Tree Study (E. Gregory McPherson, et al. 2019)
- i-Tree Suite of Tools (USFS and partners)
- Urban Forest Pest Readiness Playbook
- Guidelines for Developing and Evaluating Tree Ordinances (USFS, 2001)
- Municipal Codes and Ordinances (Center for Watershed Protection, USFS, 2018)
- Sustainable Forestry Initiative's Urban & Community Forestry Standards
- Arbor Day Foundation's Tree City USA reporting database (2020)
- A 2014 Community Forestry Census of Tree Activities (Hauer, et al. 2014)

Climate Resilience: Sister City Climate Analyses, native, drought tolerant and highly adaptable tree species lists, watering and irrigation plans, xeriscaping, green stormwater management, pest and

disease management protocols, severe weather planning and emergency management, wood utilization, carbon offsets, carbon services calculated from tree and canopy data, soil management, open space and natural area management protocols, water quality analyses based on tree and canopy data.

Environmental Justice: Equity Checklist, continuous feedback loop, coordination with city communications and local partners, language translations, analyses of tree canopy and sociodemographic data, pop-up events, childcare services, access to public transportation for public events, ADA compliant graphics and content

Community Participation and Outreach: effective planning process and successful implementation of the Plan cannot be achieved without the support from the community. The following provides special considerations that may be applied to this project:

- ◊ Identify policies and practices that exacerbate existing gaps between the community; incorporation of a Social Vulnerability Analysis; strategies for increasing access to decision-making in the planning process; diversity of languages and cultural backgrounds of residents incorporated into the outreach plan.
- ◊ Partnership with local organizations; internal engagement plan; coordination with City communications; alignment with existing efforts; consistent and inclusive messaging; equity and environmental justice strategies; diverse engagement strategies and activities; marketing and design; project/program branding.

RELATED PROJECT EXPERIENCE

Winter Haven, FL Urban Forest Management Plan
Date: September 2022 – May 2023 | **Budget:** $23,750
Scope of Services Provided: As a subconsultant to NRPS, Inc. Legacy Arborist Services, PlanIT Geo provided an analysis of public tree inventory data and the planting site inventory (collected by LAS) to develop data-driven strategies for the UFMP. The project included guidance for the reformation of the Urban Forestry Advisory Board, tree ordinance evaluation and recommendations / red-lining, a routine maintenance, planting, and removal program, an emergency preparedness plan, public outreach strategies, and public meetings. In addition, an interact Story Map was prepared.
Status: Completed

Fort Worth, TX and Texas Tree Foundation Urban Forest Master Plan
Date: August 2022 - Current**| Budget:** $93,863
Scope of Services Provided: The Urban Forest Master Plan ("UFMP", "Plan") was initiated by the City of Fort Worth— with support from Texas Trees Foundation (TTF) and donors— as a multifaceted approach for enhancing the urban forest, creating a proactive tree maintenance schedule, strengthening community resilience, implementing actions to address urban heat, and ensuring that public trees and their associated benefits are distributed equitably throughout the City. The teams assembled to complete the Plan include the prime consultant (TTF), PlanIT Geo as the planning subconsultant to TTF, engagement consultants consisting of MIG and J. Williams Group reporting to TTF, the Project Team consisting of consultants and City staff, the Steering Committee, Internal Stakeholders, and External Focus Groups. Together, a shared vision for the City's urban forest will be developed along with goals and the strategies that will create long-lasting impacts. The planning process consists of an internal outreach plan, questionnaires and interviews with City staff and elected officials, a public survey hosted on TTF's project website, focus group meetings, messaging campaigns, pop-up events, monthly Project Team meetings, quarterly Steering Committee meetings, analyses of tree inventories and canopy assessment data, benchmarking research, and a comprehensive urban forest audit. The findings from these

planning tasks were utilized to develop draft and final strategies relating to canopy goals, tree maintenance, storm response and recovery, partnerships and ongoing public engagement, updates to ordinances and policies, urban heat mitigation, pest and disease management, trees for stormwater management, reduction and resolution of tree and infrastructure conflicts, redressing tree inequities, tree preservation and planting, and other vital strategies identified. The strategies are guided by the Plan's overarching goals and vision and supported by indicators and targets, the implementation and monitoring plan, the financial plan, and the key performance indicator tracking tool. PlanIT Geo coordinated the final design of the Plan with MIG and supported MIG's engagement strategies by providing urban forestry context, data, and findings uncovered during the planning process. Final reporting includes a Phase 1 Technical Report and the final Urban Forest Master Plan along with an interactive KPI tracking tool.
Status: Completed

Los Banos, CA Urban Forest Management Plan
Date: February 2021 – November 2022 | **Budget:** $61,305
Scope of Services Provided: Once the inventory of 13,000 trees and 4,900 planting spaces was completed the data was reviewed and analyzed to assess the current status of the city's urban forest; determine the health, viability, and condition of the City's urban forest. The planning process consisted of benchmarking research, code redlining, tree canopy assessment and canopy goals, urban heat analyses, programmed pruning strategies, and public engagement. To shape the management plan, tree ordinances, planting lists, processes, standards, policies, and practices were reviewed. A new recommended Master Street Tree List was developed by reviewing tree species performance and changing climates. With input from City staff, the Tree Commission, community input, and benchmarking research, the ordinance review included revision to antiquated language, alignment with industry standards and best practices, canopy cover retention policies, no-net-loss, tree permitting processes, CalFire recommendations, and tree mitigation / replacement requirements. To implement the plan and to sustain a vibrant urban forest, recommended program structures, budgets, and activities were developed. Included a presentation of the draft to the Tree Commission and City Council and staff training to administer the UFMP. The final UFMP was adopted by City Council on November 2, 2022.
Status: Completed

Rochester, MN Urban Forest Master Plan
Date: June 2020 - June 2021 **| Budget:** $55,000
Scope of Services Provided: The purpose of this project is to utilize the data from the canopy assessment to develop a public engagement supported comprehensive Urban Forest Master Plan for Rochester, applicable for the period 2021-2041. This Plan will align with other City comprehensive plans and Rochester's infill development and transit-oriented development strategies. The Canopy Coverage Analysis enable City staff to use accurate and up-to-date Urban Tree Canopy (UTC) and Potential Plantable Area (PPA) metrics to establish canopy cover targets at various geographic scales, and to develop the strategies necessary to achieve these goals. To complete the Master Plan, public meetings, surveys, research, data analyses, benchmarking research, and program auditing will be conducted. This information will inform the development of goals, strategies, actions, and adaptive management measures to make this a living document for years to come.
Status: Completed

ALEX HANCOCK
Urban Forestry Climate Consultant, PlanIT Geo



Certifications
- *ISA Certified Arborist #FL-8295A*

Education
Master of Science in Forest Resources and Conservation - University of Florida (2017)
Graduate Certificate in Geospatial Analysis (2017)
Bachelor of Urban Planning- University of Cincinnati (2011)

Alex is an ISA Certified Arborist with a background in urban planning, urban forestry, and sustainability. She is experienced in tree canopy cover analysis, climate action planning, zoning and land use planning, and public policy. Her most recent role as Sustainability Coordinator and Certified Arborist for the City of St. Petersburg, FL focused on programs for climate resilience, clean energy, waste reduction, environmental justice, and urban forestry. Her team developed, published, and is implementing the Integrated Sustainability Action Plan, which emphasizes equity as a primary focus of planning for a sustainable and resilient future.

At PlanIT Geo, Alex applies these experiences and skillsets to support the development of urban forest plans for communities. Specifically, she is directing the integration of urban forestry into sustainability planning for communities through public engagement, staff consultations, policy analysis, and plan development.

Marysville, OH | Urban Forest Management Plan, 2023 (In progress)
Alex serves as team lead for the Marysville's UFMP, which included a research deep dive, staff surveys and meetings, analyses of existing tree inventory and canopy assessment data, benchmarking research, community engagement with public meetings and a survey, an urban forest audit, and strategies and recommendations relating to maintenance, planting, canopy goals, ordinances, funding, and program structure.

Westminster, CO | Urban Forest Management Plan, 2023-2024 (In progress)
Alex supported the development of City of Westminster's UFMP by completing a tree ordinance review with recommendations using industry standards, best management practices, and a benchmarking exercise that compared Westminster's code with five other cities in the region. Alex also implemented an assessment of the canopy cover in the City's open spaces and calculated an estimate of trees the City manages in open spaces based on urban tree canopy cover data.

San Leandro, CA | Trees Master Plan, 2022-2024 (In progress)
The Trees Master Plan includes an updated inventory of 20,000+ street trees and 2,000 park trees to develop strategies for a healthy and resilient tree canopy. Equity was centered throughout all phases of the development of the Tree Master Plan, including incorporation of racial equity and indigenous practices, soliciting community engagement and input, and assessments of tree canopy alongside social vulnerability. The Plan makes the benefits of an urban tree canopy accessible to all neighborhoods, especially those with residents that are lower-income and communities of color. Alex led the TMP's stakeholder and community engagement, and completed a Sister Climate City Assessment along with benchmarking to guide the update of a draft recommended tree species list.

Urban Forestry Experience and Projects (Not Comprehensive)
- Winter Haven, FL Urban Forest Management Plan (PlanIT Geo)
- Lakewood, WA Tree Ordinance Evaluation (PlanIT Geo)
- Renton, WA Urban Forest Management Plan 10-Year Update (PlanIT Geo)

Andrea Starbird
Urban Forestry Consultant, PlanIT Geo



Certifications
- *ISA Certified Arborist, Municipal Specialist #PN-9084AM*
- *ISA Tree Risk Assessment Qualified*

Education
South Seattle State College - Certificates in Urban Forestry and Landscape Horticulture
Bachelor of Arts, Art History - Focus: Landscape Architecture & Public Space - University of Michigan - 2011

Andrea is an ISA Certified Arborist Municipal Specialist and urban forestry professional specializing in management and preservation of urban trees integrating emerging technology, industry best practices and collaborative problem solving among stakeholders. She has demonstrated success in building and fostering relationships while improving operational efficiency and project outcomes. Assisting customers in urban forestry planning and managing trees as infrastructure through an environmental justice and social equity lens. Her skills and experience include arboricultural practices, landscape design and architecture plan review, tree inventory, field inspections, advanced tree assessment, municipal planning, root infrastructure conflict mitigation, tree installation and maintenance, policy development, project management software, code analysis, city code, stakeholder meetings, public projects, i-Tree, tree impact assessment, landscape planning, hazard tree risk assessment, tree value and appraisal, ecosystem services, remote evaluation and assessment, mapping, technical writing, staff coordination, dispute resolution, public education, public speaking, process improvements

As part of the PlanIT Geo team, she draws on her experience to provide comprehensive ordinance evaluation and meaningful public engagement to support tailored, actionable urban forest management plans.

City of Issaquah Urban Forest Management Plan, 2023-2024 (PlanIT Geo)
Lead research of existing practices, ordinances, and policies and lead public engagement and meetings with the public, commissions, and City Council.

City of Wilsonville, OR Tree Manual, 2023 (PlanIT Geo)
Researched and drafted a manual that includes tree-related ordinances, processes, permitting, and communications to support a citywide vision of a sustainable urban forest.

Arborist Projects
Washington State Parks Department Risk Assessment, 2021 (Tree Solutions) Conducted advanced inspection of old-growth conifers in a randomized evaluation using emerging technologies to inform tree risk mitigation processes and best practices.

Microsoft Modernization, 2019-2022 (Tree Solutions)
Multi-billion-dollar campus redevelopment project. Co-project arborist responsible for tree preservation across a 74-acre site containing second-growth forest. Facilitated bi-weekly coordination meetings where project teams negotiated to reach a consensus on preservation approach.

Urban Forestry Experience and Projects
- Issaquah, WA Urban Forest Management Plan (PlanIT Geo)
- Wilsonville, OR Tree Manual (PlanIT Geo)

Logan Johnson

Urban Forestry Planner, PlanIT Geo



Certifications

- *ISA Certified Arborist, Municipal Specialist #ID-8398A*
- *ISA Member*
- *Tree Care Industry Association: Tree Care Specialist Training Program*

Education

Masters of Environment, Urban Resilience and Sustainability - University of Colorado Boulder (2023)
Bachelor of Science in Biology, College of Charleston (2018)
Minor in Environmental Studies & Sustainability

Logan is experienced in assisting communities with tree, pest, and pathogen identifications, GIS analyses, urban forestry, urban planning, arboriculture communication, brokering community relationships, and stakeholder engagement through his previous work with the Trust for Public Land, Nature-based Climate Solutions, and as an Urban Forestry Consultant at PlanIT Geo. Logan has worked locally, specifically with the City of Westminster to identify tree canopy inequity gaps and canopy cover analysis, as well as Bolster tree planting efforts And strategic planning for urban forest resources. For NbS and TPL, Logan explored and researched nature-based solutions across several municipalities on how to best adapt NbS practices to urban landscapes, specifically through urban forestry solutions and initiatives. He is an ISA Certified Arborist and is experienced in both ArcGIS and the i-Tree software suite. As an Urban Forestry Consultant at PlanIT Geo, Logan provides urban forestry services for communities, organizations, and private firms. His expertise includes urban and community forestry management, planning, community education and engagement, and innovation. In this role, Logan works with small and large communities, statewide agencies, and non-profit organizations to enhance urban forest management through public engagement to develop strategic tree planting plans, tree inventories, management plans, canopy plans, tree conservation and restoration, tree and maintenance specs and ordinances, and regional plans.

Durango, CO CFMP (4 months, In Progress)

The Durango, CO Urban Forest Community Plan was started in 2023 as an opportunity for the City to grow and preserve its urban forest, while placing a focus around community engagement, resilience, and goal setting. Logan's role in this project has been to assist in the tree inventory analysis, community engagement, and technical writing.

Norwalk, CT UTMP (3 months, In Progress)

In 2023 the Norwalk, CT TMP started and was an opportunity to help the City of Norwalk create an effective plan to measure existing tree canopy, future canopy scenarios and goals, communicate tree benefits, and identify ways to equitably grow and preserve their urban forest. Logan's role in this project has and will be to assist in data analysis, ordinance review, communication of urban forest benefits through reports and community engagement. Additionally, he will be assisting with identifying strategies and goals for the community of Norwalk to equitably expand and preserve their urban forest.

Urban Forestry Experience and Projects

- Westminster, CO Urban Forest Management Plan (PlanIT Geo)
- Norwalk, CT UTMP (PlanIT Geo)
- Marysville, OHUrban Forest Management Plan (PlanIT Geo)
- Missoula, MO Urban Forest Management Plan (PlanIT Geo)
- NCS through Trust for Public Land
- Arborist (We Love Trees)

SECTION 3

PRICING OF SERVICES

Tasks	Hours	Cost	%
1) Project Management	72	$8,500	9%
2) Analysis of Current Status, Challenges & Opportunities	222	$24,930	25%
3) Stakeholder Participation & Outreach	220	$23,600	24%
4) Urban Forest Plan Development	384	$42,880	43%
TOTALS	**898**	**$99,910**	**100%**

Staff	Title	Rate	Hours	Cost	%
Alex Hancock	PM, UF Planner II	$125	310	$38,750	39%
Andrea Starbird	UF Consultant II	$110	236	$25,960	26%
Logan Johnson	UF Consultant I	$100	352	$35,200	35%
TOTALS			**898**	**$99,910**	**100%**

SECTION 4

SCHEDULE



SECTION 5

CLIENT REFERENCES

City of Winter Haven, FL -
Contact Names: Charlie Marcus - NRPS LAS Forester/Arborist, Savanna Winstanley - City of Winter Haven Ecosystem & Asset Analyst
Email: charliem@nrpsforesters.com | swinstanley@mywinterhaven.com
Phone: (850) 570-5963 (LAS) | (863) 298-7507 (Winter Haven)
Urban Forest Management Plan Project: As a subconsultant to NRPS, Inc. Legacy Arborist Services (LAS), PlanIT Geo provided an analysis of public tree inventory data and the planting site inventory (collected by LAS) to develop data-driven strategies for the UFMP. Alex led the majority of project tasks in this UFMP process. The project included guidance for the reformation of the Urban Forestry Advisory Board, a tree ordinance evaluation with recommended draft language, a routine maintenance, planting, and removal program, an emergency preparedness plan, public outreach strategies, and public meetings. In addition, an interactive Story Map was prepared.

City of Sanford, FL -
Contact Name: Elizabeth Harkey - Urban Forester
Contact Info: Elizabeth.Harkey@sanfordfl.gov | (407) 688-5000 ext.5416
Urban Forest Management Plan Project: As a sub-consultant to Earth Advisors, Inc., PlanIT Geo wrote the Plan which included an analysis and summary of tree inventory data, an assessment of the program's resources and structure, budget recommendations for tree management and planting, maintenance schedule, and recommendations. Also included an analysis of ecosystem benefits of the inventoried trees and tree and palm planting and maintenance best practices.

City of Boynton Beach, FL -
Contact Name: Rebecca Harvey - Former Sustainability Coordinator
Contact Info: Rebecca.Harvey@co.thurston.wa.us | (360) 463-8181
Public Tree Inventory Summary Report Project: To support the City's tree canopy cover goal and sustainability policies, PlanIT Geo's ISA Certified Arborists completed a public tree inventory of 11,309 trees and palms across public properties including street rights-of-way, facilities, and parks. The data from the inventory was analyzed Citywide, within street rights-of-way, by facility, and by park. In addition, analyses were conducted for trees and palms separately as the maintenance varies for these. Park trees and palms are also summarized separately since the management of trees and palms differs within parks and along streets. Additional analyses included location, growing space, status, species diversity, genera diversity, size classes, condition, observations, tree work needed, maintenance priorities, relative performance indices, and ecosystem benefits and services. To support implementation of the Report's recommendations, an interactive Public Tree Management Worksheet was prepared that lays out the timing and costs for each maintenance priority by tree size class across a 7-year maintenance cycle. Recommendations within the Report include strategies for maintenance, removals, and plantings, actions the City should take for its urban forestry program, and the guidance for public outreach and education.

NOVEMBER 28, 2023

CITYWIDE URBAN FOREST PLAN

City of Opa-locka, Florida

PlanIT Geo™
developers of TreePlotter

PRICE PROPOSAL FORM

PROPONENT understands and agrees that the Contract Price is the lump sum to furnish and install all of the Work complete in place. Vendor's price will not be adjusted unless the CITY changes the scope of the Project after the Contract Date.

As such, the Vendor shall furnish all labor, materials, equipment, tools, superintendence, and services necessary to provide a complete, in place Project for the Proposed Price of:

LUMP SUM PRICE: $ 99,910

SUBMITTED THIS 28 DAY OF November 2023.

BID SUBMITTED BY:

PlanIT Geo, Inc.
Company

630-333-5176
Telephone Number

Carrie Asselmeier
Name of Person Authorized to Submit Bid

NA
Fax Number

Signature

carrieasselmeier@planitgeo.com
Email Address

Proposal Coordinator
Title

CITY OF OPA-LOCKA
DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Ian Hanou (Name) the CEO (Title/Position) of PlanIT Geo (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

11/10/2023
Date

Signature

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employe provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or anot subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registrati with, and use of the E-verify system in order to verify the work authorization status of all newly hired employe Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Ver System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during t term of the contract; and

b) All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contract to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledg and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contra is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, th Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," a amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the wor authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting tha the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor sha maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contrac or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract i terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for period of 1 year after the date of termination.

Company Name: PlanIT Geo, INC

Authorized Signature: [signature]

Print Name: Ian Hanau

Title: CEO

Date: 11/10/2023

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

Ian Hanou being first duly sworn, deposes and says that:

(1) He/She/They is/are the CEO (Owner, Partner, Officer, Representative or Agent) of Plan17 Geo the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Witness

Witness

By: _____
Signature

Ian Hanou CEO
Print Name and Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: Ian Hanou

Title: CEO

Sworn and subscribed before this

10th day of November, 2023

Notary Public, State of Florida

Emily Solis

(Printed Name)

My commission expires: 11/08/2025

EMILY SOLIS
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20214044100
MY COMMISSION EXPIRES NOVEMBER 8, 2025

Detail by Entity Name

Foreign Profit Corporation

PLANIT GEO, INC.

Filing Information

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FEI/EIN Number	87-2444903
Date Filed	06/23/2023
State	CO
Status	ACTIVE

Principal Address

18263 W. 94TH LANE
ARVADA, CO 80007

Mailing Address

PO BOX 1334
WHEAT RIDGE, CO 33433

Registered Agent Name & Address

WOOD, THOMAS
6097 TOWN COLONY DR
BOCA RATON, FL 33433

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature _____

Printed Name Ian Hanau

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

► **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
PlanIT Geo, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☒ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
PO Box 1334

Requester's name and address (optional)

6 City, state, and ZIP code
Wheat Ridge, CO, 80033

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number
			–			–				

or

Employer identification number
8	7	–	2	4	4	4	9	0	3

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person** ► Tom Thompson **Date** ► 05/19/2023

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

CITY OF OPA-LOCKA

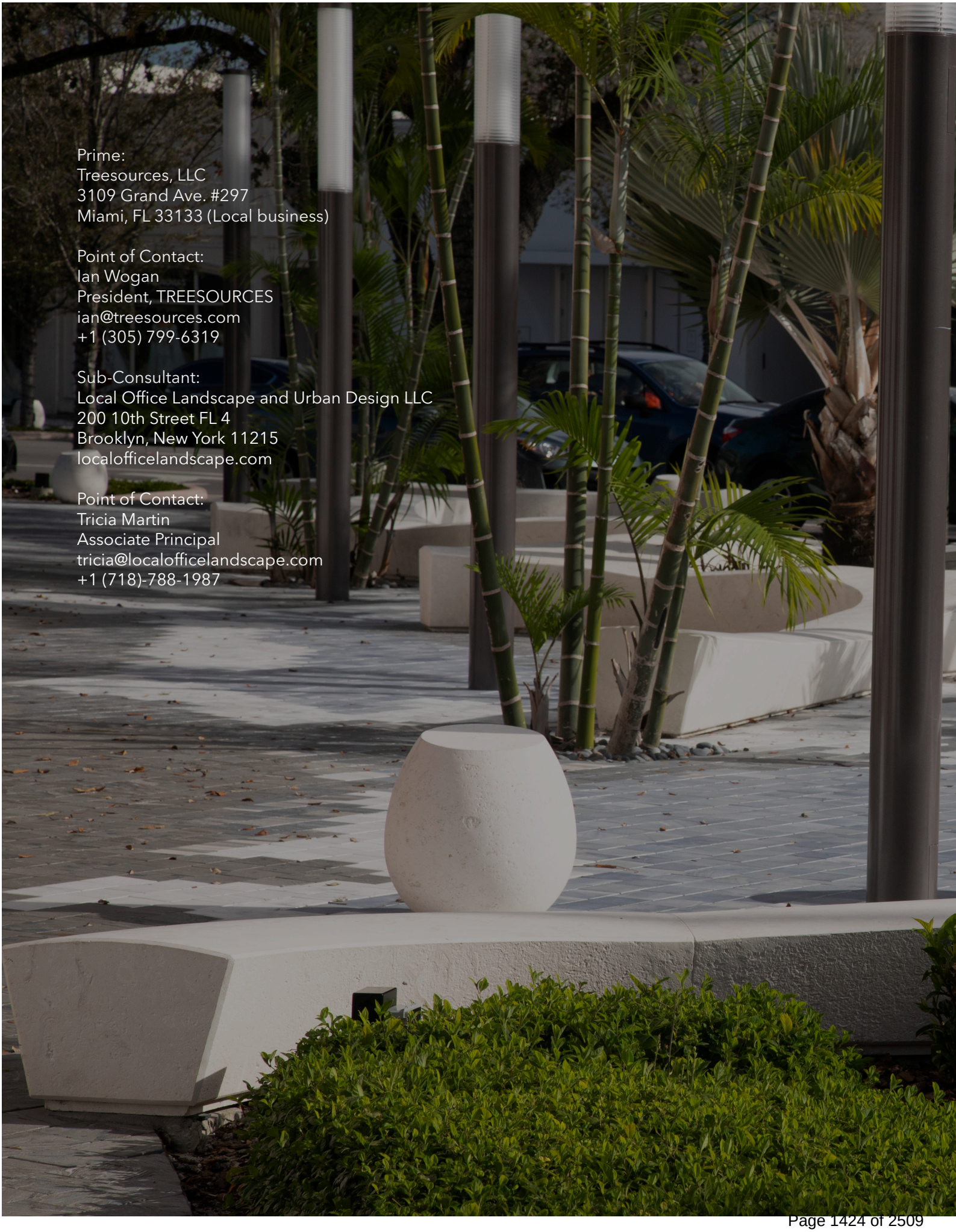
RFP NO. 23-1128200
OPA-LOCKA CITYWIDE URBAN FOREST PLAN

Treesources, LLC
3109 Grand Avenue, #297
(305) 799-6319
Ian Wogan - ian@treesources.com
November 27th, 2023


TASTEFUL
내가 너를 기억함은 진실

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Prime:
Treesources, LLC
3109 Grand Ave. #297
Miami, FL 33133 (Local business)

Point of Contact:
Ian Wogan
President, TREESOURCES
ian@treesources.com
+1 (305) 799-6319

Sub-Consultant:
Local Office Landscape and Urban Design LLC
200 10th Street FL 4
Brooklyn, New York 11215
localofficelandscape.com

Point of Contact:
Tricia Martin
Associate Principal
tricia@localofficelandscape.com
+1 (718)-788-1987

DEAR SELECTION COMMITTEE,

Treesources, LLC and Local Office Landscape & Urban Design are pleased to submit our qualifications and proposal for the project known as Citywide Urban Forest Plan (City of Opa-Locka) as specified within the solicitation RFP No. 23-1128200. For participation in this process, we expressly state that our team will provide the service requested in the Request for Proposal (October 25th, 2023) and addendum No. 1 (November 14th 2023), in compliance with the terms in the Agreement, for the prices submitted with the Bid.

Treesources and Local Office Landscape & Urban Design have prepared a tailored response to the City of Opa Locka's request for an Urban Forest Plan. Results from our services will be critical to the City in understanding the urban canopy (existing, projected, and potential conditions), prioritized strategies for urban forest management, protocols for implementation and monitoring of goals, and the strategic advancement of social equity and improvements to the quality of life for Opa-Locka's residents.

Treesources provides expertise in green infrastructure and arboriculture projects. The firm strives to provide public and private sector clients with high-quality, professional, environmental and arboriculture consulting services. Treesources' staff includes ISA Certified Arborists and Scientists with extensive knowledge of local environments and the social considerations of urban forestry. Treesources is located in Miami, Florida, allowing the team to be responsive to the City of Opa-Locka and all project needs. Our full proposal expresses our commitment to community engagement. It includes the development of outreach workshops where our team will facilitate conversations about urban forestry and engage residents for their meaningful involvement in the outcome of the final plan.

Local Office Landscape & Urban Design is a landscape architecture and urban design firm based in Brooklyn, New York, but with extensive experience and presence in Florida and the Caribbean Islands. Local is a Hispanic, minority-led firm and brings their extensive knowledge of designing for extreme weather (hurricanes, heat, and droughts) into thoughtful placemaking. Local delivered Miracle Mile in Coral Gables, demonstrating that a carefully designed urban tree plan and other integrated green infrastructure strategies can mitigate even the biggest storms while revitalizing economic development.

Our team has extensive experience in tree and green infrastructure planning, ecological restoration, and environmental services within the region. We understand how important this contract is to maintaining schedules (with regard to associated potential associated projects and funding opportunities), controlling costs, and providing a comprehensive Urban Forest Plan. We are a team that embraces community participation, welcomes the challenge of solving complex environmental and social problems, and above all else, loves trees!

We look forward to the opportunity to present our approach to this project in more detail to the selection committee upon request. Should you have any questions regarding our team or proposal, please do not hesitate to contact me.

Ian Wogan
President, TREESOURCES
Registered Consulting Arborist
FL ISA #6594-A

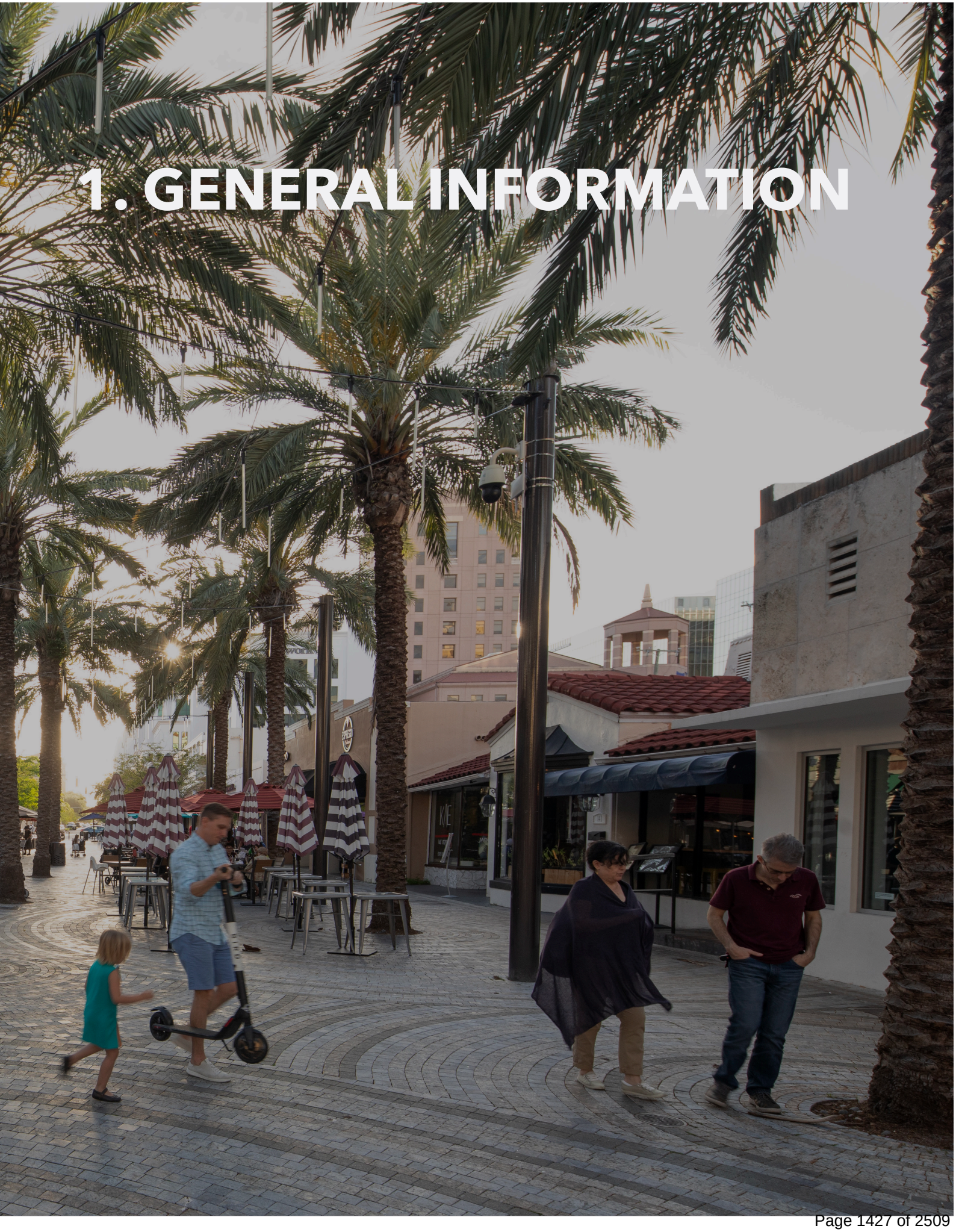
Tricia Martin
Managing Principal

Walter Meyer,
Founder & Principal



"Adapting to climate change, rather than resisting it, is a more equitable, sustainable and affordable long-term strategy. But doing so means rethinking and revaluing the urban landscape."

-New York Times on Local's Miracle Mile Streetscape



1. GENERAL INFORMATION

GENERAL INFORMATION
TREESOURCES

Prime:
Treesources, LLC
3109 Grand Ave. #297
Miami, FL 33133 (Local business)

Point of Contact:
Ian Wogan
President, Treesources, LLC
ian@treesources.com
305.799.6319
Registered Consulting Arborist
FL ISA #6594-A

Treesources, LLC was filed on November 12th, 2019 as Limited Liability Company type, registered at 2360 Overbrook Street, Miami, FL 3313.

Normal business hours: 9:00 AM - 5:30 PM EST, Monday through Friday
Number of Staff in Office: Five (5)

Treesources, LCC is not a parent or subsidiary company.

Sub-Consultant:
Local Office Landscape and Urban Design LLC
200 10th Street FL 4
Brooklyn, New York 11215
localofficelandscape.com

Point of Contact:
Tricia Martin
Associate Principal
tricia@localofficelandscape.com
+1 (718)-788-1987

Licenses and Certifications

Our team is comprised of trained and experienced personnel. Our certifications and licenses include, but are not limited to, the following list.

- Small Business Enterprise (SBE) with South Florida Water Management District
- Equitable Distribution Program (EDP) with Miami-Dade County
- Pre-Qualification for Architectural & Engineering (AE), Environmental Engineering – Biology Services, with Miami-Dade County
- ISA Certified Arborist (Select Team Members)
- ASCA Registered Consulting Arborist (Select Team Members)
- Professional Mangrove Trimmer (Select Team Members)
- Florida Stormwater and Erosion Control Certified (Select Team Members)
- OSHA HAZWOPER 10-Hour and 40-Hour (All team members)
- S130-S190 Basic Wildland Firefighter (Select Team Members)
- A-312 Water Ditching and Survival (Select Team Members)
- USACE Qualified Monitor: Birds, FL Manatee, FL Bonneted Bat, Eastern Indigo Snake, and Turbidity (Select Team Members and Projects)
- PADI Open Water SCUBA (Select Team Members)

Federal Identification:
UEI: TVZ3D7PNCYB8 | CAGE: 9MVA4 | DUNS: 070741560



QUALIFIED STORMWATER MANAGEMENT INSPECTOR

The undersigned hereby acknowledges that

Alex Held

has successfully met all requirements necessary to be fully qualified through the Florida Department of Environmental Protection Stormwater Erosion and Sedimentation Control Inspector Training Program

07/26/2021

Inspector Number 48121

Jared Searcy
Statewide Training Coordinator

Kevin Coyne
WQRP Program Administrator



Last updated: 7/26/2023

Mr Ian Wogan, RCA #684
Registered
ian@treesources.com

My Engagement

Professional Information

TREESOURCES
President
2360 Overbrook St
Miami
Florida
33133-3185 United States
[ ]

3059059244 (Phone)
Visit Website »

Arborist Type: Other (Free Form), Private Full Time Consultant, Support to Landscape Architecture Projects

Arborist Type Other: Certified arborist #FL 6594A
TRAQ certified

State(s): Florida, Georgia, North Carolina

Services Provided: Contract Preparation and Supervision, Diagnosis of Tree and Landscape Problems, Expert Witness and Litigation, Insect and Disease Identification and Management, Plant Health Care Programs, Training and Education, Tree Planting Programs, Tree Plant Inventories, Tree Protection for Construction Projects, Tree Risk Assessments and Surveys

International Directory Locations: Bahamas, Caribbean

BCMA: No

ISA Certified Arborist: Yes

Emergency Management Institute

FEMA

This Certificate of Achievement is to acknowledge that

ALEXANDER R HELD

has reaffirmed a dedication to serve in times of crisis through continued professional development and completion of the independent study course:

IS-00100.fwa
Introduction to the Incident Command System,
ICS-100 for Federal Workers

Issued this 28th Day of January, 2013

Tony Russell
Superintendent
Emergency Management Institute

0.3 IACET CEU

The International Society of Arboriculture

Hereby Announces That

Ian Wogan

Has Earned the Credential

ISA Certified Arborist ®

By successfully meeting ISA Certified Arborist certification requirements through demonstrated attainment of relevant competencies as supported by the ISA Credentialing Council

Caitlyn Pollihan
CEO & Executive Director

25 February 2014	30 June 2026	FL-6594A
Issue Date	Expiration Date	Certification Number

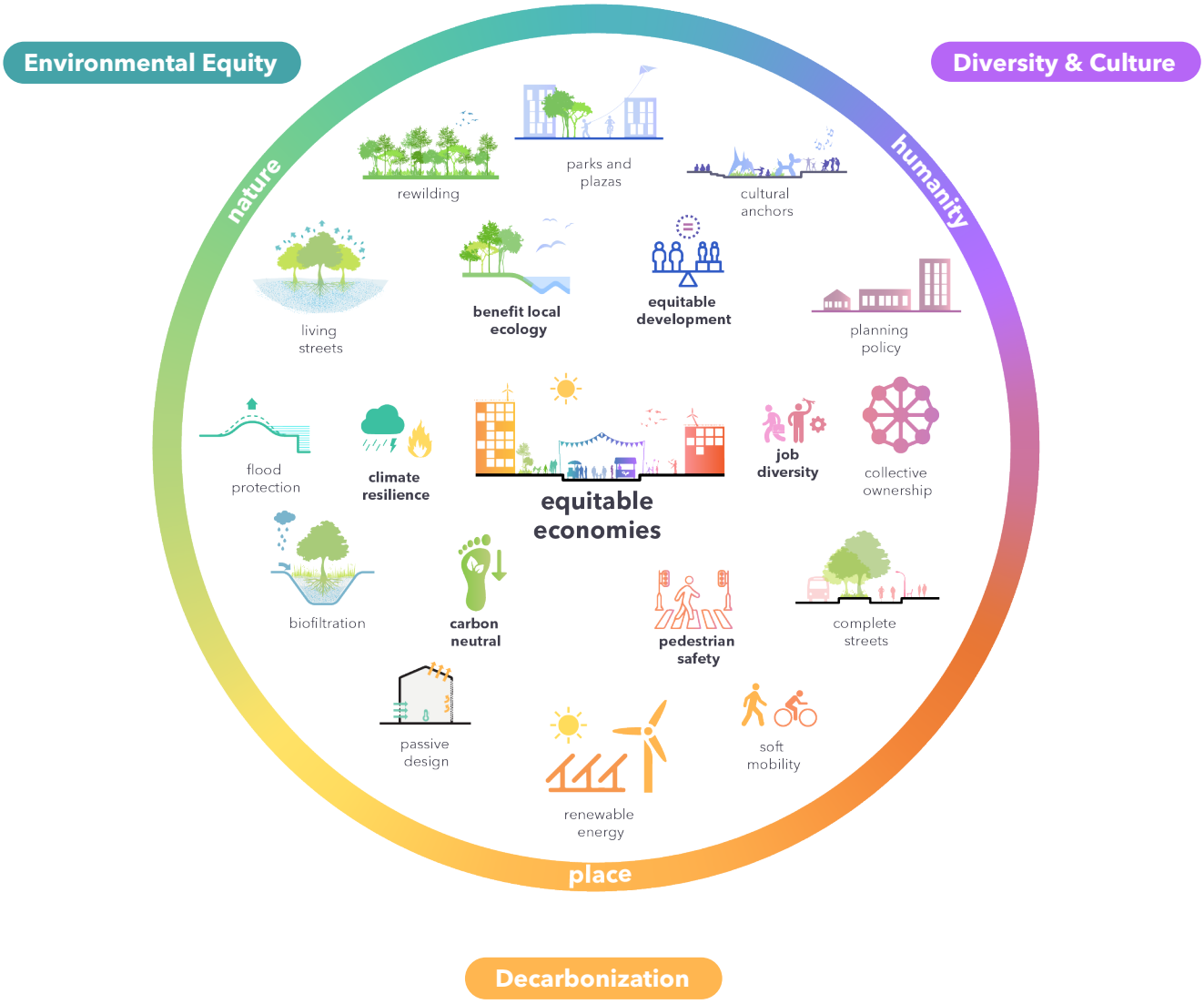
ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17024
PERSONNEL CERTIFICATION BODY
#0847
ISA Certified Arborist


“Through managing green infrastructure projects at every stage of their life-cycle, we are able to recommend, implement and manage tree canopy preservation that has generational impact.”
- Treesources



2. PROJECT APPROACH

STUDYING OPA-LOCKA
PROJECT APPROACH



An Equitable Approach to a Comprehensive Urban Foresty Plan

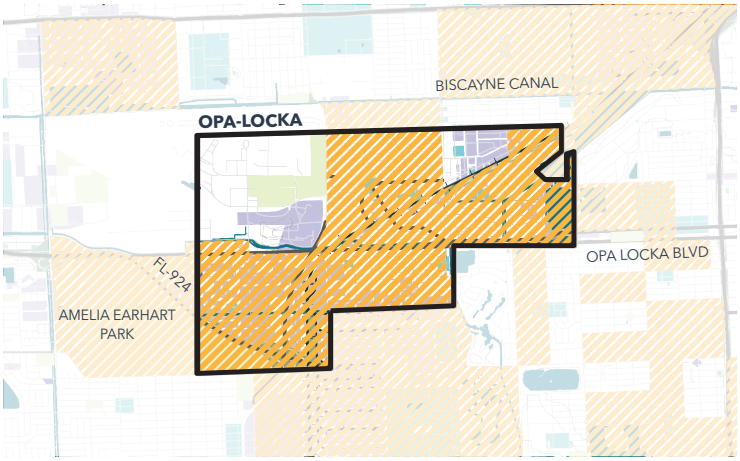
"Our vision is for the equitable creation of wealth and resilience, bolstering natural systems to protect against climate disturbances, integrating future technologies into our communities, and building diversity and collective ownership into the fabric of our cities. By tapping into local ecological and cultural knowledge, we develop strategies to add social and economic value, bringing prosperity to residents. Planning policy is used as an instrument to ensure the longevity and transparency of development processes, creating a framework for the ecology, the economy, and the community to flourish."

An Integrated Approach to Urban Forestry

Our team has a diverse background, making us well-positioned to apply an integrated approach to urban forestry. An integrated urban forestry plan addresses multiple societal demands that include a variety of factors, including heat and flooding mitigation, soil health and protection, water conservation and management, biodiversity conservation, recreation, beautification, and quality of life. An integrated approach will develop and implement a meaningful community engagement plan to address local communities' specific needs and desires. Stakeholder and community engagement will drive our analysis and outcomes as we seek co-benefits to implement a robust urban forestry plan.

STUDYING OPA-LOCKA
PROJECT APPROACH

Build from Current Work In Opa-Locka
Our team is excited by the prospect of working on this Urban Forest Plan for Opa-Locka as we are familiar with many of the environmental and social conditions. Our current EPA-funded work with the local not-for-profit Waterkeeper identified six to eight green infrastructure pilot projects in Miami-Dade County. Opa-Locka has been identified as one of the priority areas. Priority area criteria were determined using three primary data sets: Environmental Justice Zones [EJ], high heat index, and frequent flooding. In addition to mapping these conditions across the county, we zoomed into each community exhibiting these conditions and performed finer-scaled analysis - including locations of institutions, parks, and critical landmarks. Our team would love to continue exploring opportunities to address the environmental and social risks in Opa-Locka through this exciting and important Urban Forest Plan Project.

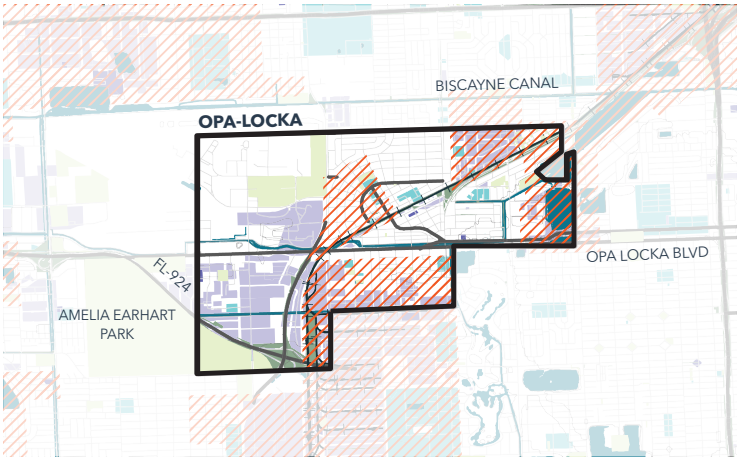


Areas where EJ Index is inthe 98th Percentile or greater compared to the state

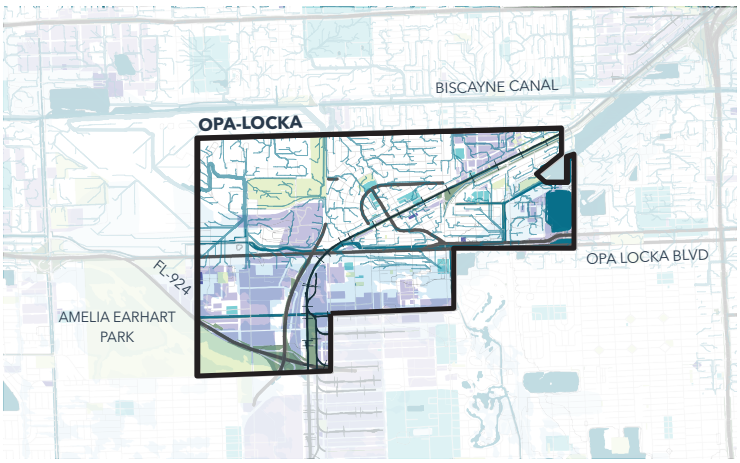
Consider Operations and Management from the Start:
Our team applies our extensive experience **building** landscapes in cities, including green infrastructure and tree planting, to inform our planning projects. Lessons learned working extensively with federal, state, county, and city agencies in Florida provide us with a solid, knowledge-based background to analyze existing data and make innovative yet pragmatic implementation decisions.

An integrated Urban Forestry Plan will rely on inter-agency coordination, extensive community and stakeholder engagement, and technical expertise. Technical expertise includes providing "tested" tree planting and urban forestry details and specifications that reduce operations and management fees. Our team understands that innovation cannot succeed without considering operations and maintenance from the start.

As part of our initial analysis and community engagement workshops, we will interview staff involved (across agencies) to care for trees and other landscapes (including parks) within Opa-Locka. These "City Conversations" will provide critical information in developing the Plan. In addition to the interviews, our team will research and share case studies demonstrating how other cities across the Nation operate, manage, and fund extensive, integrated urban forestry plans. The case studies will provide knowledge that will inform a proposed management plan for Opa-Locka and the policy changes needed to implement the Plan.



Areas where Urban Tree Canopy is less than 10%



Hydrology and areas of 1% flood risk

TASKS & KEY DELIVERABLES
SCOPE OF WORK

In translating the initial research into a strategic vision, this project will follow a phased approach requiring careful coordination and a streamlined process between stakeholders, the Client, and the Project Team. Here we have outlined our process for Tasks 1-4, from project management to completion, to provide an understanding of our design process and demonstrate how we can work with you to bring the Opa-Locka Urban Forest Plan to life.

Task 1 Project Management (Duration of the project)

Treesources [TS] will be the Project Lead. Martinez Held will be the Project Manager and the Project's primary contact. TS will provide and maintain a progress schedule and will submit project updates to the City per an agreed-upon methodology (e.g. email).

Treesources [TS] will work closely with our sub-consultant, Local Office Landscape and Urban Design [Local], to plan and coordinate a "kick-off" meeting with key staff from the City of Opa-Locka. During the kick-off, Project Goals will be established.



Treesources: Snapper Creek

TS/Local will review relevant material from the City and additional entities (as relevant to Urban Foresty Master Plan).

Initial inquiries include:

1. Determine if there are any conflicts between canopy goals and the existing plans/policies as reviewed;
2. Determine the existing and potential plans/policies that enable progress toward canopy goals;
3. Make recommendations to reach canopy goals and improve practices.

Task 1 Deliverables:

- 1 Kick-off Meeting
- Identify key staff at City and preliminary stakeholder list
- Determine frequency (and delivery) of progress reports/meetings
- Describe preferred formats for public engagement
- Finalize project schedule
- Organize and submit meeting minutes no more than five days after meetings

Task 2 Analysis of Current Status, Challenges, and Opportunities (Four months)

Working closely with the Client, our team will assess the Urban Canopy Cover and associated social, economic, and environmental relationships. Including, but not limited to, existing inventory analysis (structure, characteristics, species, concerns); ecosystem benefits; equity assessments and scores; value and appraisal (if possible with existing data); overall health of canopy (if discernible); urban forest vulnerabilities and threats.



Treesources: Snapper Creek

TASKS & KEY DELIVERABLES
SCOPE OF WORK

In addition to the above, our team will also conduct the following:

- Remote sensing: We will use remote sensing technologies including LiDAR and aerial photography to collect data, including hydrology to visualize the direction and magnitude of stormwater across the study area.
- Field measurements: If necessary, our team is prepared to verify existing surveys, including tree inventories
- Our team will conduct a thorough analysis of the existing tree canopy in the Study Area, including loss of trees, hot spots, and risks to vulnerable populations. Heat and air quality will be analyzed in relationship to tree canopy. The following approaches will be considered: Remote sensing and GIS analysis: Our team will use remote sensing and GIS analysis to assess the extent and distribution of tree canopy cover within the Study Area. We will use satellite and aerial imagery to generate maps and data on tree cover.
- Risk analysis: Our team will assess natural hazards in critical locations, including areas with vulnerable populations and infrastructure. This involves analyzing data on flood hazard frequency, duration, magnitude, and impact and using this information to identify areas of high risk and to develop risk mitigation strategies.
- Risks: low lying elevations, damaged habitat such as wetlands and tree canopy, poorer communities and aging housing and infrastructure will be explored
- Assets: Intact habitats such as wetlands, parks, street trees, housing, roadways, power plants and other utility companies, etc.

Our team will also review and assess the City's organizational capacity. We will assess the City's existing program, structure, and budget via document review and interviews.

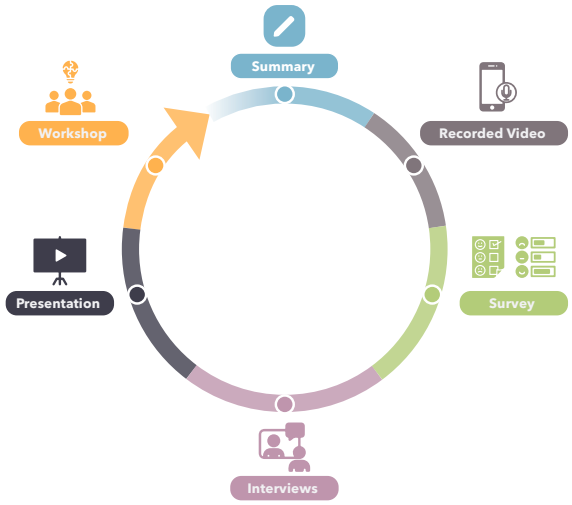
Task 2 Deliverables:

- Summarize recommendations on city codes, programs, and policies
- Develop challenges and opportunities maps
- Develop risk and asset assessments
- GIS maps and analysis
- We will consolidate all maps,charts, and other data into an Existing Conditions Technical Memorandum

Task 3. Community Engagement (Ongoing throughout the Project)

Community engagement will be routinely conducted throughout the project's lifespan. Engaging with the community will inform the research and Final Plan while facilitating communication on the project vision and design intent.

Our team will also work closely with the City of Opa-Locka, organizing and conducting public workshops. TS will lead the community engagement, with Local supporting the team with graphics and outreach as needed.



Our key strategies include:

Organize and Lead Public Workshops:
Assist with facilitating and leading up to three (3) neighborhood-focused public workshops: Generate and organize agenda, materials and meeting minutes for three (3) workshops.

- Workshop #1: Evaluate and discuss existing plans and data, review GIS analysis and impacts of flooding and heat and review critical infrastructure.

- Workshop #2: Workshop on urban forestry mitigation strategies and potential project concepts to flooding and heat in the planning study area.

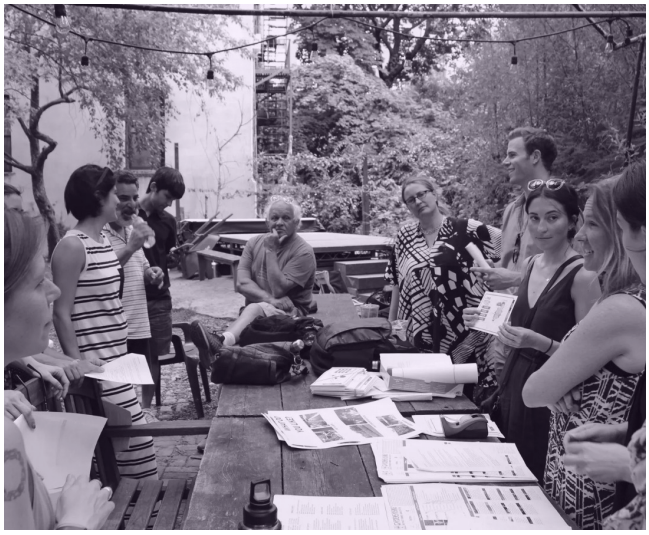
- Workshop #3: Present draft final report and discuss implementation next steps with the community and stakeholders.

TASKS & KEY DELIVERABLES
SCOPE OF WORK

Outreach materials:
Our team will develop and provide all outreach materials in both English and Spanish. Staff from Local Office and Treesource speak conversational Spanish.

Task 3 Deliverables and Meetings:

- Assist in developing a digital platform for greater reach and participation
- Presentation quality materials for all meetings and events
- Agendas and meeting minutes for all events
- Hold a minimum of two (2) community meetings (with an offer to have multiple) with community groups.
- Provide summary to City and input findings into Plan.



Local Office: Community Engagement Meeting, NY

- Provide recommendations for ongoing community input on urban forest management
- Provide recommendations for changes to City policies and related plans
- Provide recommendations for expanding the City's tree inventory to include all City trees
- Provide recommendations for the ongoing effectiveness of the Plan and implementation phasing as needed.

The Urban Forest Plan will address a range of strategies and typologies for green infrastructure approaches such as reduction of effective impervious cover through the use of green stormwater infrastructure on public and private property to reduce flows to the system; opportunities for increased flood storage within the drainage area; and location of opportunities to increase urban canopy and green spaces aiding in flood reduction, water quality enhancement, and reduction of urban heat impacts. Other key approaches include the following:

- Trees for Heat
- Trees for surface flooding
- Trees for Ground Water Management
- Trees for biodiversity
- Trees for mental health and quality of life

Task 4: Deliverables:

- Draft Urban Forestry Plan
- Final Urban Forestry Plan
- Draft and Final Plans will include: Urban Tree Canopy Analysis; Stakeholder input; and Master Plan

Task 4. Urban Forest Plan Development (5 months)

Our design team will work closely with the City of Opa-Locka to develop a comprehensive Urban Forestry Plan, with the goal of retaining and expanding park trees and developing recommendations to increase the overall canopy, including trees not managed by the City.

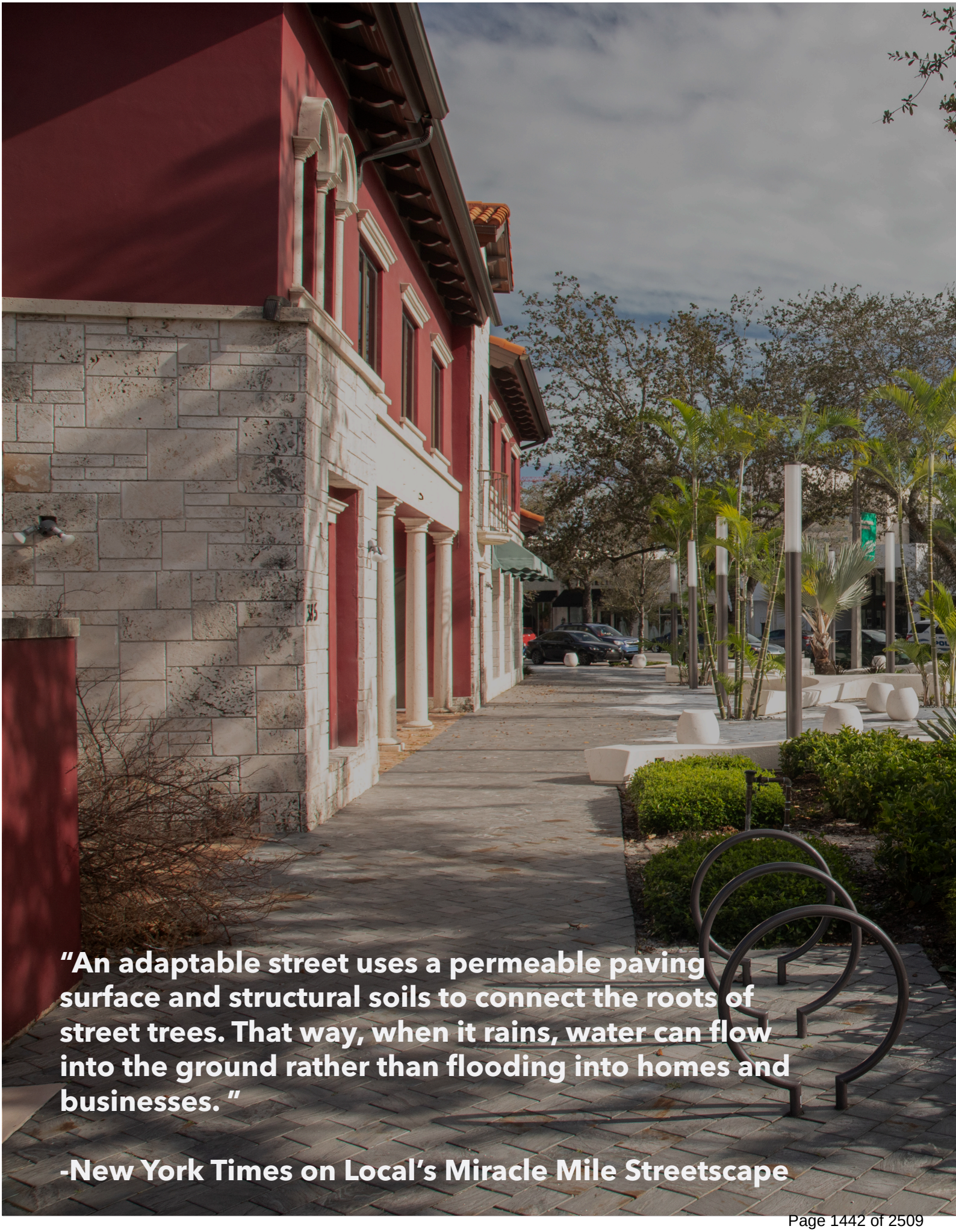
The following tasks will be included in our scope of work:

- Identify principles and key goals for the plan update:
- Include key performance indicators
- Identify recommended tree species and management recommendations
- Provide recommendations for Staffing Structure, Function, Budget, and Revenue for Urban Forests
- Provide a list of challenges and solutions for maintaining a healthy urban forest



Local Office: Beach Outfalls Pilot, NY

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“An adaptable street uses a permeable paving surface and structural soils to connect the roots of street trees. That way, when it rains, water can flow into the ground rather than flooding into homes and businesses. ”
-New York Times on Local’s Miracle Mile Streetscape



3. PROJECT EXPERIENCE

Our client list is diverse and includes non-profits, residential, HOA's, institutions, and government entities. Additional Project Experience, as well as budgets and references, beyond this page is available upon request.

Client: Miami-Dade Department of Transportation and Public Works
Project Type: Large-XL Tree Relocation and Care for Establishment Period
Project included the relocation of large, specimen-size native trees as part of a transportation project.
Duration: December 2022 **–** August 2023

Client: City of Hialeah
Project Type: Tree Planting and Care for Establishment Period
Our team is contracted to plant over 250 trees within the City of Hialeah's neighborhoods and parks.
Duration: August 7th, 2023 **–** In progress.

Client: Factory Town – Green Infrastructure Management
Project Type: Design and Tree Stewardship (Planting and Care for Establishment Period)
Our team has managed the tree resources within the Factory Town, an innovative campus and venue with the City of Hialeah. Management includes tree planting, relocation, maintenance, and tree health care. Our team has also designed and implemented several stormwater projects at Factory Town, including the design/build of a micro-Cypress Dome and linear bioswales to manage surface water onsite.
Duration: 2021 **–** Ongoing

Client: Pelican Harbor Seabird Station
Project Type: Florida Bonneted Bat Survey
Our experts conducted roost surveys for the Florida bonneted bat as part of the ecological evaluations performed pre-construction.
Duration: 2021

Client: FR-Aleman – Stormwater Improvements South of Fifth Miami Beach
Project Type: Arborist Report
Our experts conducted arborist surveys of over 500 trees for a large-scale project comprised of stormwater infrastructure improvements in the City of Miami Beach.
Duration: 2022

Client: PMG – E11even Hotel and Residences
Project Type: Arborist Report
Our experts conducted arborist surveys for new construction of a hotel and residences within downtown Miami.
Duration: 2022

Client: Bartlum Yards – Stock Island Marina and Residential Development
Project Type: Ecological Resource Evaluation and Arborist Report
Our experts conducted preconstruction surveys for potential presence of protected wildlife and habitat, including wetlands, essential fish habitat, and listed species. Additionally, we produced an arborist report which included coastal trees such as mangroves.

CULMER PLACE REDEVELOPMENT
MIAMI, FLORIDA

Project: Culmer Place Redevelopment

Program: Residential

Service: Resiliency Analysis and Landscape Design

Collaborators: HSQ GROUP, INC., Corwil Architects

Size: 13.65 Acres

Cost: $94,000 USD

Location: Miami, Florida

Status: In Progress

Reference: Kenneth Naylor, COO
Atlantic Pacific Communities
knaylor@apcommunities.com









Local Office led a group of engineers and architects to revitalize Culmer Place, an affordable housing community in hopes of alleviating the increasingly high demand for affordable housing in South Florida. This Miami Public Housing Apartment complex comprises of two, three, four and five-bedroom units in a two-story quadplex/townhouse-style buildings. Most of these units will be offered to those making at or around 60 percent of the area's average median income.

The team investigated the housing system's demographics, site ecology, hydrology, solar, and wind profiles, in order to design a landscape to meet the development's human and environmental needs. Green and blue elements are layered throughout a range of spaces to encourage the circulation of water and people across the site. This includes a dendritic internal path network, a medium size plaza space, a fenced pool area, and a redesigned streetscape-- all including raingardens to manage stormwater to natural drainage points based on site hydrology studies.

SOUTHWEST STREETSCAPES
MIAMI, FLORIDA

Project: South West Streetscape Master Plan

Program: Resiliency Analysis and Streetscape Master Plan

Service: Analysis and Design

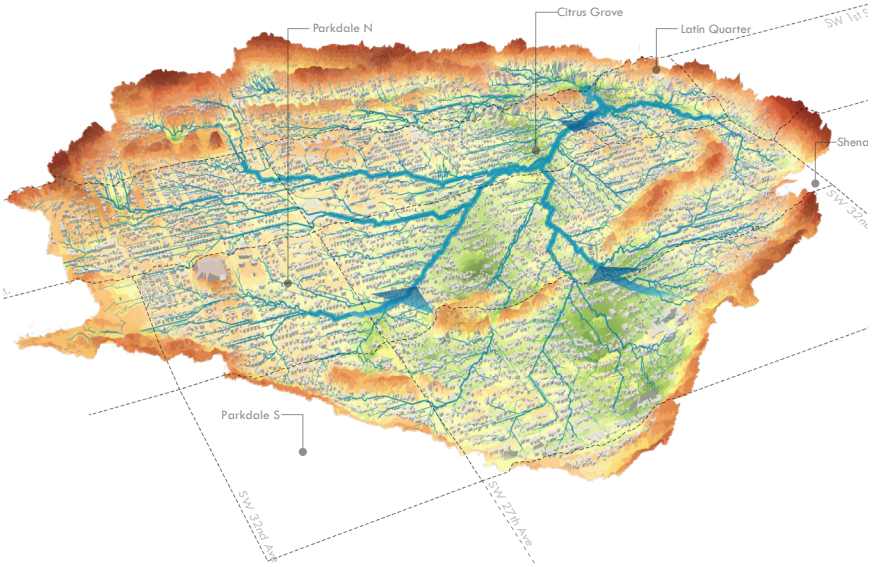
Size: 7 sq mi

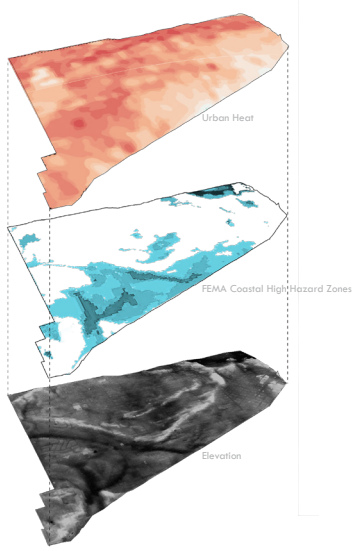
Cost: $500,000

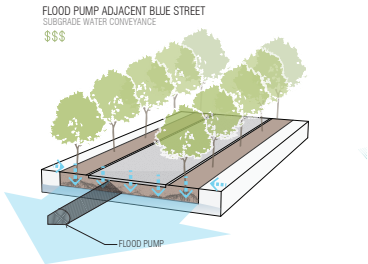
Location: Miami, Florida

Status: on-going

Reference: Jennie Rogers
Principal, Curtis + Rogers Design Studio
tel +1 (305) 442-1774
jennie@curtisrogers.com







The city of Miami commissioned Local to create a streetscape and tree master plan for South West Miami. The project spans 3 districts and 13 neighborhoods, and focuses on water management and environmental justice to increase the city's resilience.

The masterplan responds to environmental analysis and proposes a rigorous tree-planting strategy to mitigate both the urban heat island effect and flooding, and includes a tree planting toolkit designed for the city of Miami. The topography, flood zones, and city hydrology were used to create a watershed model, which was overlaid with an urban heat map to determine priority areas. The socioeconomic analysis combined community demographic data including age, ethnicity, income, and home values to determine the most vulnerable populations. The overlaid drawings of socioeconomic vulnerability, heat islands, and flood corridors defined priority zones for infrastructure updates. These methods combine a green and blue infrastructure network that will increase the city's water retention capacity.

The masterplan proposal found that updating only 20% of the city's existing infrastructure would meet the city's water conveyance needs.

QUEENS GRID TREE DISPOSITION AND MASTER PLAN

QUEENS, NEW YORK

Project: Queens Grid Urban Tree Plan

Program: Public

Service: Tree Disposition Plan, Tree Master Plan, and Constuction Documents

Collaborators: NYC Department of Design and Construciton; STV and Dewberry Engineering

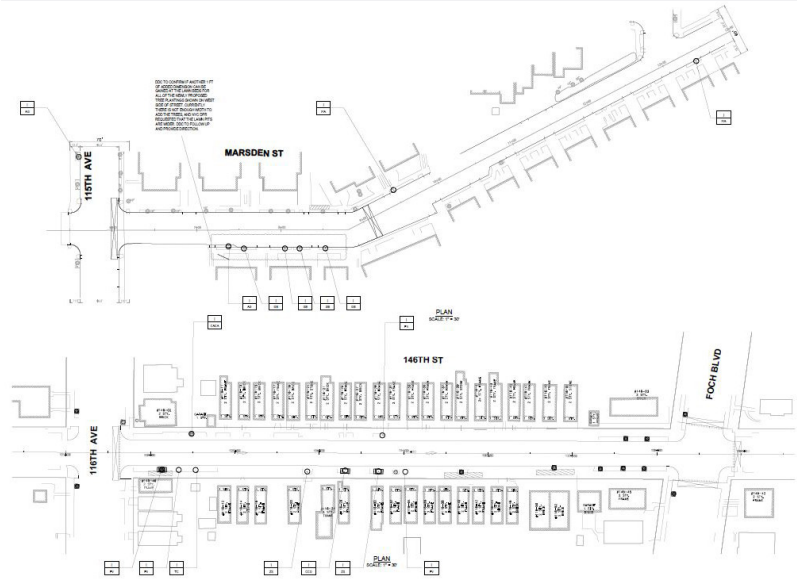
Size: 13.65 Acres

Cost: $150,000 USD

Location: Queens, New York

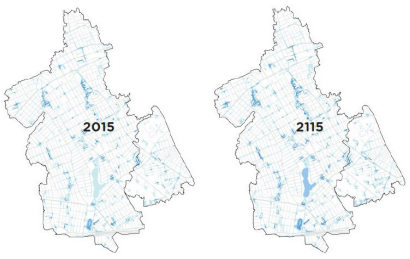
Status: Construction Documentation Phase

Reference: Lisa Martusciello, (o) 646.388.5112
lisa.martusciello@stvinc.com









The New York City Department of Design and Constructed [DDC] commissioned our team, led by STV Engineering, to create a tree disposition and tree master plan for a residential area of Queens, New York. The project is part of a larger initiative by the NYC Department of Environmental Protection to address flooding and improve the quality of stormwater runoff. This area of Queens floods regularly, marking it a high priority for the City. The project includes full-road reconstruction throughout the neighborhood, presenting opportunities for our team to address water quantity, quality, and conveyance.

Our services included extensive area analysis, including Topography and Hydraulic analysis, to identify the direction of stormwater flows and areas of highest flooding. Our analysis also included mapping existing trees, identifying tree species, and the condition of the trees. This effort was an inter-agency collaboration with our engineering partners, DDC, the New York City Department of Transportation, and the NYC Parks and Recreation Department.

The second phase of our tree plan effort identified areas for new trees. New trees were proposed for sidewalk areas where trees have died or are in poor health, left-over and residual public spaces, highway and railway easements, and pocket parks in the study area..

ARVERNE VIEW RESILIENCY
FAR ROCKAWAY, NEW YORK

Project: Arverne View

Program: Neighborhood Master Plan

Service: Resiliency Analysis and Masterplan Design

Collaborators: L+M Development Partners Inc., Insight Civil Engineering, Steven Dubner Landscaping Inc., Bright Power

Agencies: HUD, FEMA, HDC

Size: 15 acres

Cost: $4 million USD

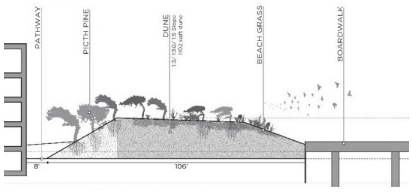
Location: Far Rockaway, New York

Status: Completed, 2018

Reference: Deborah Morris, Executive Director of Resiliency Planning
tel +1 (212) 863-6097
morrisd@hpd.nyc.gov









Local led the efforts in the planning and designing of a resilient affordable housing campus in Far Rockaway, New York; Arverne View. The team was tasked with addressing surge protection, rainfall management, and elevated groundwater management in this holistic resilient design.

The design approach was focused and strategic. Bioswales are strategically placed throughout the site to manage rainfall and groundwater ponding at low-lying areas. A barrier dune, planted with salt-loving species, mitigates saline summertime breezes while buffering the complex from the threat of a future sea surge. Large New England-native trees are planted in tight clusters to avoid wind corridors and protect from harsh winter airflows. A large solar battery provides energy resiliency to critical systems, common spaces, and elevators, should the backup systems fail.

The resulting design of Arverne View significantly relies on native species for protection, beauty and comfort, and provides a well-protected complex and landscape gathering areas, bolstering the sense of social resilience of this community.

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4. TEAM STRUCTURE



Community Involvement

Helping to build a better community.

Service is in our company DNA. We are proud to contribute to making our community a healthy, safe, and enjoyable place to live, work, and play through our work and community involvement. Our service work includes company beach cleanups, community workshops and green job skill-building, arts + science events, and more.

Our team makes long-term commitments to environmental efforts and our projects. We are keen to showcase our projects to the community via environmental education events when requested.

Our team is committed to inclusive collaboration and excellence. We understand the value of community and what it means to support each other. Treesources works diligently to attract, develop, and retain a diverse team that is representative of our community.



A Safety Culture

We begin everything with safety.

Safety is ingrained in everything we do. We care about the people we work with, and we take this responsibility very seriously. As early as the planning and design phase, we look for ways to make the work safer during project implementation. We review our plans for potential safety concerns and address them before the work begins. Training is developed and delivered on the job site and in the office to ensure we remain sharp and focused on our efforts.

Routine training and site-specific orientations are developed and delivered to prepare our team for the work. Concomitantly, we utilize and implement proven tools and tested industry standards for safety including, OSHA and American National Standard for Arboriculture Operations (ANSI).





IAN WOGAN
PRESIDENT



Ian Wogan
President of Treesources
ian@treesources.com
3109 Grand Ave #297
Miami, FL 33133
305.799.6319

Education
BA Environmental Studies, Florida International University

Certifications / Memberships
ISA, Certified Arborist (FL#6594A)
ASCA Member, Registered Consulting Arborist #684
Trimmer (FDEP & Miami Dade County DERM), Florida Urban Forestry Council
Executive Board Member, President - Tropical Arborist Guild
Treemendous Executive Board Member
Florida Native Plant Society (FNPS) Executive Board Member

About
Ian Wogan is the President of Treesources. Ian has overseen daily operations of prescribed tree management (structural pruning, invasive tree removal, cabling and bracing, relocation, planting, etc), horticulture management and arboriculture consultation. Ian has led a wide range of arboriculture-based projects, including mangrove management, native habitat restoration, hurricane preparation and post-storm recovery efforts, tree mitigation, adaptive tree management strategies in the urban environment, specimen tree restoration and management planning and land-use/development consultation. Most recently, he has been working closely on projects within South Florida to guide solutions in the management, protection & restoration of the urban canopy.

Recent / Related Projects

Neighborhood Development Association, Miami Design District, City of Miami, Florida –
Responsibilities: Development and implementation of long-term urban tree health and management plan.

Factory Town, City of Hialeah, Florida –
Responsibilities: Arboriculture consulting, landscape design, tree relocation and planting.

GREEN Tree Planting, City of Hialeah, Florida –
Responsibilities: Project management, planting >250 trees in municipal parks and ROW.

Old Cutler Road Intersection Improvements DTPW, Miami-Dade County, Florida –
Responsibilities: Project management, relocation of large-XL trees from project to municipal and county park spaces.

ALEX MARTINEZ-HELD
PROJECT SCIENTIST

Alex Martinez-Held
Project Scientist
alex@treesources.com
3109 Grand Ave #297
Miami, FL 33133
786.351.6713



Education
BS Environmental Science, University of Oregon
MS Biology, Florida International University (2024)

Certifications / Memberships
Professional Mangrove Trimmer (Miami-Dade County)
SCUBA Certified
40-hr OSHA Hazwoper Certification
S130-S190 Basic Wildland Firefighter
A-100 Basic Aviation Safety
A-312 Water Ditching and Survival
FL Stormwater and Erosion Control Inspector Certified

About
Alex has seven years of experience in the environmental field working in the public and private sector. Alex has worked in both laboratory and field settings; conducting research projects, analyzing large datasets, and producing scientific reports. He has worked on projects which focus on ecological monitoring, involving extensive and remote fieldwork, including wildlife surveys, exotic and invasive species surveys, soil sampling, water quality monitoring, and GIS analysis. He has coauthored technical reports, involving analysis of large datasets that track the progress of Everglades restoration projects.

Recent / Related Projects

Singer Island Bridge Replacement, Singer Island, Riviera Beach, FL –
Responsibilities: Preconstruction surveys, GIS analysis, technical memorandums.

Cocoplum Bridge Replacement, City of Coral Gables, FL-
Responsibilities: Preconstruction surveys and technical memorandums.

USACE CEPP South Contract 1, L-67A Structures (S-631, S-632, S-633) Spoil Pile Removal; L-67C Gap Project, Miami-Dade County, FL –
Responsibilities: Preconstruction surveys and endangered species surveys, species and water quality monitoring, technical memorandums.

Miami Beach Stormwater Infrastructure Improvement Project, City of Miami Beach, FL –
Responsibilities: Tree surveys, GIS analysis, and arborist report.

CERP Biscayne Coastal Wetlands L31-A Flow-way (Phase I Project), Pump Station S-709,
Miami-Dade County, FL –
Responsibilities: GIS analysis, technical memorandums, and monitoring of listed species.

Pelican Harbor Seabird Station, City of Miami, FL –
Responsibilities: Florida bonneted bat roost surveys and reporting.

West Brickell Middle School, City of Miami, FL –
Responsibilities: Florida bonneted bat roost surveys and reporting for FDOT.

TOM WOGAN
ARBORICULTURE CONSULTANT

Tom Wogan
Arboriculture Consultant
tom@treesources.com
3109 Grand Ave #297
Miami, FL 33133
305.203.5978



Education
US Naval Academy

Certifications / Memberships
ISA, Certified Arborist

About
Tom Wogan was an engineer and the Plant Supervisor at the Turkey Point Nuclear Generating Facility Plant for over 35 years. He is now an ISA certified arborist with Treesources where he provides expertise in arboriculture consulting and tree management for new construction and large-scale development. Tom's unique background adds valuable analytical, detail-orientated, and problem-solving skills to our project approach.

Recent / Related Projects

Highland Park Development, City of Miami, Florida –
Responsibilities: Tree surveys, arborist report and tree resource evaluation including comprehensive development recommendations.

Little River Neighborhood Development, City of Miami Florida –
Responsibilities: Tree surveys, arborist report and tree resource evaluation including comprehensive development recommendations.

Homestead Park Expansion/Development, City of Homestead, Florida –
Responsibilities: Tree surveys, arborist report and tree resource evaluation including comprehensive development recommendations.

Neighborhood Development Association, Miami Design District, City of Miami, Florida –
Responsibilities: Implementation of long-term urban tree health and management plan.

Old Cutler Road Intersection Improvements DTPW, Miami-Dade County, Florida –
Responsibilities: Evaluation of tree resources for relocation feasibility.

WALTER MEYER, RLA, LEED
FOUNDING PRINCIPAL



Education
Master Landscape Architecture and Urban Design
Harvard University

Bachelors Landscape Architecture
University of Florida

Certifications
Registered Landscape Architect, Connecticut
LIC#: LAR.0001625

Registrations
LEED AP

Affiliations
American Society of Landscape Architects

Languages
English
Spanish

Walter Meyer
Founding Principal

Walter is the Founding Principal of Local Office a practice he established in 2006. Walter is widely acknowledged implementing resilient infrastructure systems at all scales. His work includes the Parque del Litoral in Mayaguez, Puerto Rico, the first implementation of phytoremediation technology at the city scale. The project won the 2010 AIA Honor award in Puerto Rico and served as the site for the 2010 Central American Games. His current work includes advising the National Parks Service, the New York City Department of Parks and Recreation, and the Army Corps of Engineers on coastal resilience in New York.

In 2013, Walter was honored by the Obama administration as a 'Champion of Change' for the leadership he demonstrated in response and recovery efforts following Hurricane Sandy using alternate energy as a means of immediate relief and an engine for long-term economic recovery. In 2010, he was also recognized by the Congressional Hispanic Caucus for "leadership and innovation in the green economy."

Walter has taught at Columbia University's Graduate School of Architecture, Planning and Preservation (GSAPP), the Pratt Institute and Parsons School of Design.

Arvene East Urban Design and Infrastructure Plan
Queens, New York
Principal-In-Charge for a 45-acre coastal development that anticipates sea level rise and climate volatility situating the neighborhood above the 100-year flood plain and counters potential economic challenges by proposing a transit-oriented neighborhood with 1,200 units of housing and 160,000 square feet of retail. The landscape serves as a performative infrastructure with a connected network of bioswales capturing stormwater, flood storage capacity, and recreational paths. Solid waste water and compost feed an anaerobic digester that produces water for irrigation, electricity and green jobs. The development produces all its energy and is designed as a resilient hub for neighboring communities in times of disturbance.

Beach Green North
Queens, New York
Principal-In-Charge and Resilient Systems Designer for the first multi-family affordable housing complex to achieve Passive House standards in the country. The two buildings host 200-units with reduced energy demands and provide uninterrupted power while managing hydrological vulnerabilities through landscape infrastructure. In addition to guaranteeing residents stable electricity and comfortable temperatures during disturbances, residents benefit from reduced or negative utility bills, expanding the affordability of their units.

Miracle Mile Streetscape
Miami, Florida
Principal-In-Charge for the redesign of the four-block commercial and cultural heart of Coral Gables, Florida, known locally as "The Miracle Mile." The project transformed the monofunctional surface of the streetscape into a resilient infrastructure with creative grading and drainage solutions while preserving the existing monuments and mature live oaks on site. Constructed in 2017, the $20 million project was immediately tested by Hurricane Irma, a Category 4 storm. Despite rain intensity reaching seven inches per hour, the streetscape performed as designed and businesses were able to re-open the day after the storm while the surrounding districts experienced significant recovery periods.

TRICIA MARTIN, RLA, LEED-AP
ASSOCIATE PRINCIPAL



Education
Masters Landscape Architecture
University of Oregon

Bachelor Arts
University of Vermont

Registrations
Registered Landscape Architect New York
LIC#: 04-002519

Affiliations
American Society of Landscape Architects
Urban Design Forum

Languages
English
Spanish

Tricia Martin
Associate Principal

Tricia is a licensed landscape architect with over fifteen years experience working on complex urban sites ranging in scale from the region to a small lot. Her passion lies in developing projects that embrace complex urban problems and utilize landscape architecture is the agent for positive social and environmental change. Her recent work includes a vision for the next generation of streets with the Regional Plan Association (RPA).

In 2017, Tricia received an ASLA–NY Merit award for Garden Rising: Lower East Side Community Gardens Green Infrastructure Feasibility Study and a NYC Public Design Commission award for the American Airlines Flight 587 Memorial (a project she managed while working at Mathews Nielsen Landscape Architects)

Tricia graduated with a BA in Environmental Studies from the University of Vermont and received her Masters in Landscape Architecture from the University of Oregon where she received an ASLA Certificate of Honor. She has coordinated Urban Design studios at Columbia University's Graduate School of Architecture, Planning and Preservation (GSAPP) and led landscape architecture studios at City College. She is regularly invited to speak about issues related to green infrastructure and landscape urbanism and has served as President of the ASLA-NY Chapter from 2008 to 2011.

Arvene East Urban Design and Infrastructure Plan
Queens, New York
Project Manager to execute a 45-acre coastal development that anticipates sea level rise and climate volatility situating the neighborhood above the 100-year flood plain and counters potential economic challenges by proposing a transit-oriented neighborhood with 1,200 units of housing and 160,000 square feet of retail. The landscape serves as a performative infrastructure with a connected network of bioswales capturing stormwater, flood storage capacity, and recreational paths. Solid waste water and compost feed an anaerobic digester that produces water for irrigation, electricity and green jobs. The development produces all its energy and is designed as a resilient hub for neighboring communities in times of disturbance.

Brooklyn Greenway Green Infrastructure and Resiliency Guidelines
Brooklyn, New York
Principal for comprehensive stormwater management design guidelines and Resilience plan for the Brooklyn Greenway. The guidelines provide a holistic vision for development of the Greenway while addressing a range of issues influencing urban coastlines. The plan proposes to radically transform fourteen miles of Brooklyn's waterfront with a continuous bicycle and pedestrian corridor, creating the opportunities to address changing climate, rising sea levels, water quality and coastal habitat enhancements.

Far Rockaway Revitalization Plan
Principal-In-Charge and Design Lead for a revitalization plan for downtown Far Rockaway. The plan envisions a vibrant and sustainable through an analysis of the downtown area and surrounding neighborhoods. The recommendations included beautifying the streets and sidewalks and diversifying economic activity in the downtown, attracting residents, visitors, and business owners from the entire Rockaway peninsula. The project successfully integrates green infrastructure into sidewalks, parking lots, and a network of new open spaces and waterfront sites to manage stormwater, prevent flooding, and build resilience from storm surge.

VINCENT DI FUSCO, RLA, CCM
TECHNICAL DIRECTOR



Education
Bachelor of Landscape Architecture
Rhode Island School of Design

Horticulture Training Program Arnold Arboretum of Harvard University

Certifications
Registered Landscape Architect, New York
LIC#: 003012

Affiliations
American Society of Landscape Architects
Construction Management Association of America
Society for Ecological Restoration

Languages
English

Vincent Di Fusco
Technical Director

Vincent Di Fusco is the Technical Director at Local Office and a licensed landscape architect and certified Construction Manager with over 25 years of experience. His expansive skill set stems from successfully delivering high-quality landscapes throughout a wide range of project types while managing budgets, tight deadlines and diverse stakeholders. His past experience includes providing extensive construction management support to numerous capital projects for the NYC Department of Parks and Recreation (DPR), as well as Designer and Project Manager on numerous NYC based projects including The Central Park Conservatory Water Restoration, a Battery Park City Greenroof and Streetscape, and Hanover Square's British Memorial Garden.

Grove Central
Miami, Florida
Project Manager for a mixed-use development centered around a dynamic transit plaza in Coconut Grove. The plaza connects a new bus terminal to the Metrorail and adjacent commercial development. Integrating rain canopies, native trees, and shrub plantings into the urban design strategy to help infiltrate stormwater while an intricate paving pattern transitions from vehicular to pedestrian scale. The development features a spacious roof deck with a garden for residents, a barbecue area, views of Biscayne Bay, a sloped lawn with palm trees, and a pool deck. Limited space constraints were negotiated to maximize planting on the roof deck and facade of the adjacent parking garage. Station improvements required coordination with the existing Underline plans to facilitate connections between various transit modes. The process required coordinating state, county, and city planting restrictions and several rounds of permitting between entities.

Brooklyn Public Library Brownsville Branch
Brooklyn, New York
Project Manager for the redesign of a historic branch of the Brooklyn Public Library. The design includes a reconfigured fence alignment to provide a nook for the community. The Reading Garden features seating elements and immersive planting with a curated selection of native species. Permeable pavers and streetscape enhancements will be incorporated to increase landscape performance and green infrastructure.

Beach Green Dunes III
Queens, New York
Technical Lead for a climate-resilient, mixed use building development in the Rockaways; the final installment of a 3-part post-Sandy HUD funded pilot program. The project encompasses the building, green roofs, transit plaza, streetscape, and solar design. The plaza design is informed by restrictions of a DEP water easement. Stormwater is managed with a suite of green infrastructure measures, combining porous pavement, rain gardens and subgrade storage cells to promote infiltration to tree root networks.

Union Square Pavilion and Playground Expansion & Reconstruction
New York, New York
Project Manager for the award-winning $20 million construction of the North Expansion & Reconstruction of the Pavilion and Playgrounds. Provided CM responsibilities including the supervision of four prime contractors to execute the design intent and specifications while maintaining a cooperative management/contractor relationship. Additional roles included cost and schedule tracking, collaboration with the design team for modifications throughout the project, and preparation of regular reports to the Owner.

ELEANOR GIBSON
DESIGNER



Education
Master of Architecture in
Urban Design and Landscape
Architecture
Aarhus Architecture School

Bachelor of Architecture
University of Sydney

Bachelor of Interior and
Spatial Design
University of Technology
Sydney

Languages
English

Eleanor Gibson
Designer

Eleanor is a Designer with several years of international experience working in Australia, Denmark and now the US. Her multidisciplinary background has allowed her to thrive on a range of scales including interior, architectural and urban. While her passions lie in large scale climate resilience and urban retrofits, she designs with a holistic understanding of the human scale and experience, regardless of project size.

Eleanor's prior experience includes collaborating at Bjarke Ingels Group (BIG) Copenhagen office as a Landscape Architect, where she worked on several large scale master plan projects, blending infrastructure and ecology into built form. As a student, she also worked at C.F. Møller Architects and Terroir Architects in Copenhagen, and Hassell in Sydney.

Eleanor received a Bachelor of Interior and Spatial Design degree from the University of Technology Sydney in 2015, a Bachelor of Architecture degree from the University of Sydney in 2016, and a Master of Architecture in Urban Design and Landscape Architecture degree from Aarhus Architecture School in Denmark in 2021.

Destination Streets
Miami, Florida
Designer for a downtown streetscape transformation, that incorporates green stormwater management into a newly pedestrianized plaza for retail, dining and events. The project responds to the needs of the surrounding businesses, formalizing the street's temporary pop-up events into a destination with year-round programming. The street experience is unified with a suite of modular and movable furniture, including seating, lighting, bike parking and waste receptacles. The paving pattern responds to the site's microtopography, creating shaded community 'rooms' within the established tree canopy.

Baja California Regional Master Plan
Baja California, Mexico
Landscape Architect for a 600 acre development and ecological strategy aimed to create a vibrant destination for the tech creative community. The project establishes a new form of nature-driven development in an area known for gated resorts and golf courses. The master plan concept was driven by analysis of the site's topography and unique climate, creating several distinct, inherently site-specific neighborhoods. In-depth climate analysis was used to develop a landscape strategy of greener micro-climates within a desert landscape and generating a self-sustaining water and energy supply for the region.

Education Esbjerg Neighborhood Master Plan
Esbjerg, Denmark
Landscape Architect for a new educational institution and campus on the preexisting reclaimed land island of Esbjerg Strand, accommodating 950,000ft² of education, residential and mixed-use program. The master plan responds to existing site conditions of noise, wind, tides, and sunlight to sculpt a dynamic perimeter block, where all interior spaces have park or sea views. Public promenades on the ground and roof invite life into the area and create a lively destination for both locals and visitors.

JACK KRANES
STUDIO ASSISTANT



Education
Bachelor of Arts
Marine Affairs
Rosenstiel School of Marine, Atmospheric, and Earth Science
University of Miami

Language
English

Skills and Qualifications
Proficient in ArcGIS, Google Suite, Microsoft Office Suite, WordPress
Experienced in maintaining and collecting data from YSI EXO2 Multiparameter Water Quality Sonde, both stationary and handheld models

Jack Kranes
Studio Assistant

Jack's interest in urban design stems from a fascination with the connection between the natural and human-made world. He is passionate about broadening the public's understanding of green infrastructure and implementing sustainable designs within the public realm. His prior experience includes biodiversity and water quality research at the Hudson River Wetlab, as well as the non-profit organization Miami Waterkeeper where he conducted environmental policy advocacy and GIS analysis of water pollution issues in Miami-Dade County.

Jack received his Bachelor of Arts Degree in Marine Affairs from the University of Miami.

Miami Waterkeeper
Miami, FL
Policy Analyst for the nonprofit Miami Waterkeeper. Conducted research on multiple projects related to the health of Miami-Dade County's aquatic environment, including polluted stormwater runoff, green infrastructure design, and the municipal sewage system. Used ArcGIS and Microsoft Office in tandem to construct reports that present data and textual information in an accessible manner for multiple audiences.

Hudson River Park Trust
New York, NY
Field Science Assistant at the Hudson River Park Trust's Wetlab. Oversaw operation of flow-through aquarium system, including day-to-day animal care, tank cleaning, and pipe maintenance. Lead aquarium's open hours, educating over 5,000 members of the public over the course of the Wetlab's open season. Conducted research on a daily basis related to six seperate projects throughout the Hudson River Park, including biodiversity surveys and water quality testing.

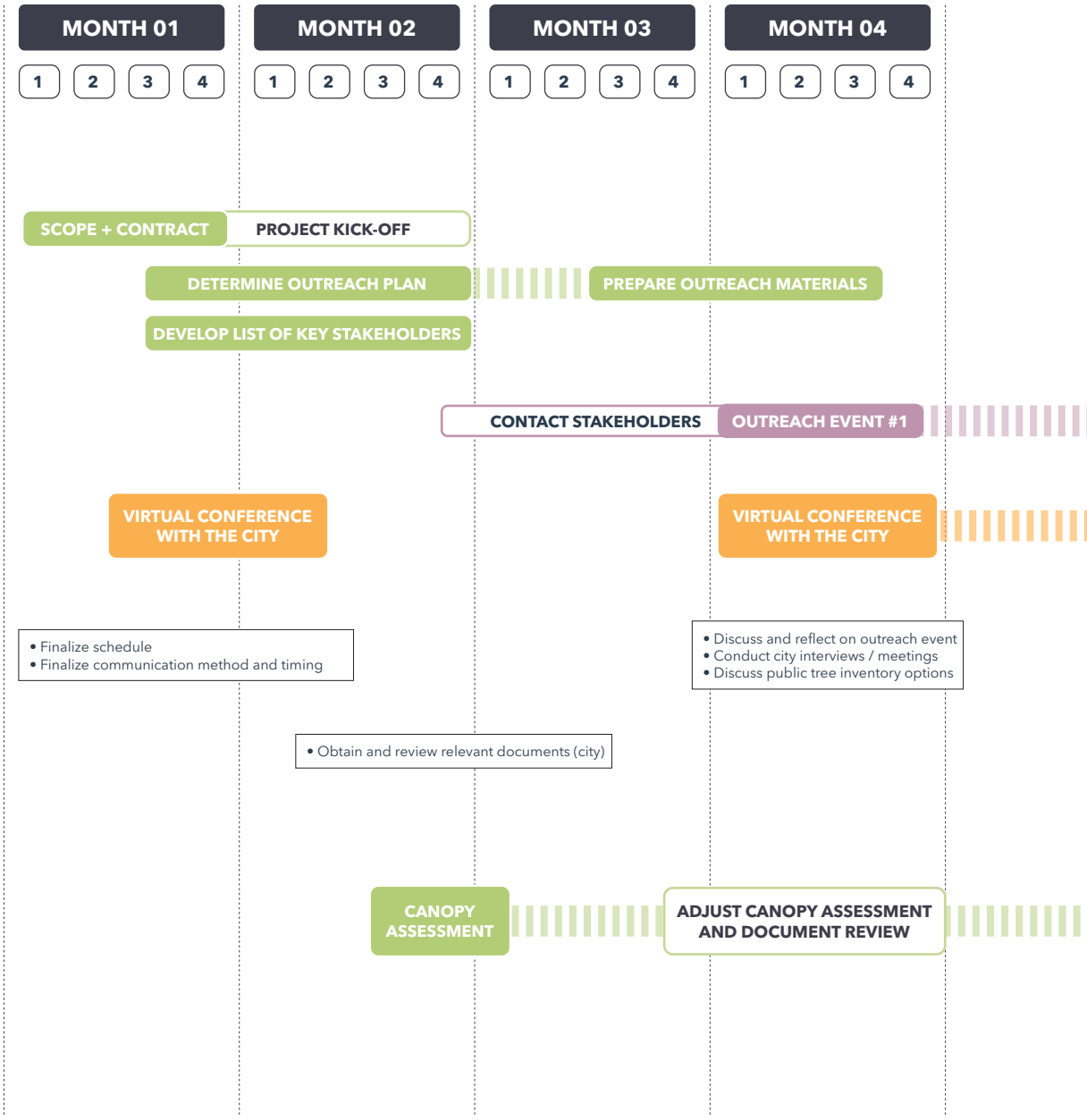
Long Island Aquarium
Riverhead, NY
Prepared daily food intake for an array of mammals, both marine and terrestrial, using a strict diet program for each organism to ensure health and keep habitats clean. Participated in multiple behavioral training sessions with the animals each day.


Tito's

5. TIMETABLE & PRICING OF SERVICES

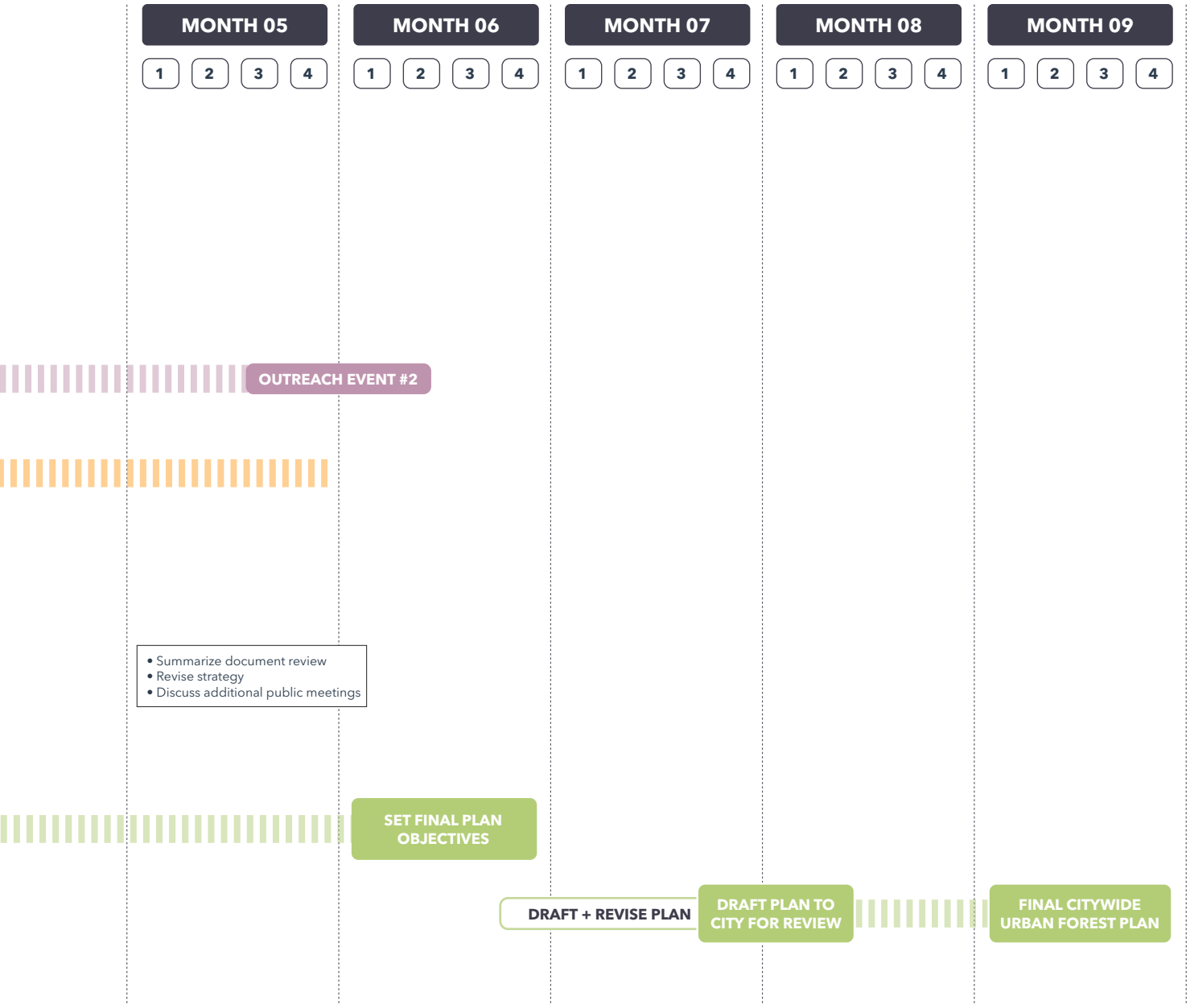


SCHEDULE
SCOPE OF WORK



week
community engagement
city meeting
task deliverable

SCHEDULE
SCOPE OF WORK



Schedule:
Based on the scope outlined in the RFP, we believe the schedule is achievable, and we will strive to accomplish all project and task milestones. We also understand that project schedules often change as a project such as this develops. With this in mind, we will review and refine the schedule with you at key project milestones to ensure the project is aligned with overall goals and timelines.

FEE PROPOSAL
SCOPE OF WORK

Primary Task Budget		
Task	**Task Title**	**Fee**
Task 1	Project Management	$13,000
Task 2	Analysis of Current Status, Challenges, Opportunities	$30,000
Task 3	Stakeholder Participation and Outreach	$20,000
Task 4	Urban Forest Plan Development	$35,000
	Total	**$98,000**
	Optional Services *(Not included in proposal price. Estimated Costs)*	**Fee**
	Public Tree Inventory	TBD
	Presentation	$10,000
	Story Maps (web-based)	$10,000
	Additional Renderings	TBD

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6. REFERENCES

Planting and stewardship of dozens of native trees, maintenance of green infrastructure resources at Factory Town.

Avra Jain
Vagabond Group
e: jainavra@gamil.com
Contract amount: $371,000 annually.
Term of contract: 2021 to present.

255 trees planted in parks and right of way areas within the City of Hialeah. Included stewardship of trees for one year.

Yamil Alquizar
City of Hialeah
e: yalquizar@hialeahfl.gov
o: 305-687-2615
Contract amount: $232,000
Term of contract: August 14th, 2023 to present.

Management and maintenance of over 500 street and rooftop trees and all landscaped areas.

Zinnia Maissonet
Assistant General Manager
Miami Design District
DACRA Development Group
Miami Design District Associates
o: 786-871-4890
3841 NE 2nd Avenue, Suite 300,
Miami, Florida, 33137
Contract amount: Approximately $500,000 annually
Term of contract: 2017 to 2022

Tree inventory and appraisal of over 600 trees. Neighborhood-scale Urban Forestry Plan for long-term considerations of forest health, maintenance, and co-benefits such as carbon sequestration and mitigation of heat.

Cynthia Seymore
Coconut Grove Business Innovation District
Executive Director
e: Cynthia@grovebid.com
m: 305.461.5506
Budget: Approximately $15,000
Term of contract: September 2022 to February 2023

Relocation of large, specimen-size and heritage trees, as part of traffic calming project in South Dade.

Josenrique Cueto, P.E. LEED GA, ENV SP
Miami-Dade County Department of Transportation and Public Works
Deputy Director – Chief Project Delivery Officer
Miami-Dade County Department of Transportation and Public Works
701 NW 1st Court, Suite 1700
Miami, Florida 33136
o: 786-469-2000
m: 786-498-9600
Contract amount: Approximately $400,000
Term of contract: 2022 to 2023

Blackwell Plaza project:

Prince R. Shah, CCM
Director of Capital Planning & Projects
Roosevelt Island Operating Corporation
e: prince.shah@rioc.ny.gov
o: 212-832-4540
m: 347-271-1657

Culmer Place Redevelopment project:

Oscar Hentschel
Development Manager
Atlantic Pacific Companies
e: ohentschel@apcompanies.com
t: 786.210.4327

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7. ADDITIONAL FORMS

PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: Treesources, LLC

   Address: 2360 Overbrook St.

   City, State, Zip: Miami, Florida, 33133 Phone/Fax: 305-799-6319

2. Check One: Corporation (x) Partnership ( ) Individual ( )

3. If Corporation, state:
   Date of Incorporation: 11/12/2019 State in which Incorporated: Florida

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:
   _____

5. **Name and Title of Principal Officers** **Date Elected:**
   Ian Wogan, Owner 11/12/2019
   _____ _____
   _____ _____
   _____ _____

6. The length of time in business: 4 years

7. The length of time (continuous) in business as a service organization in Florida:
   4 years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

PRICE PROPOSAL FORM

PROPONENT understands and agrees that the Contract Price is the lump sum to furnish and install all of the Work complete in place. Vendor's price will not be adjusted unless the CITY changes the scope of the Project after the Contract Date.

As such, the Vendor shall furnish all labor, materials, equipment, tools, superintendence, and services necessary to provide a complete, in place Project for the Proposed Price of:

LUMP SUM PRICE: $ 98,000.00

SUBMITTED THIS 27th DAY OF November 2023.

BID SUBMITTED BY:

Treesources, LLC
Company

305-799-6319
Telephone Number

Ian Wogan
Name of Person Authorized to Submit Bid

Fax Number

Signature

Info@treesources.com
Email Address

Owner
Title

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature _____

Printed Name Ian Wogan

CITY OF OPA-LOCKA
DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Ian Wogan (Name) the Owner (Title/Position) of Treesources, LLC (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

11/27/23
Date

Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

Ian Wogan being first duly sworn, deposes and says that:

(1) He/She/They is/are the Owner (Owner, Partner, Officer, Representative or Agent) of Treesources, LLC the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Alex Held
Witness

KEITH CLOUGHERTY
Witness

By: _____
Signature

Ian Wogan, Owner
Print Name and Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: Ian Wogan

Title: Owner

Sworn and subscribed before this

27 day of November, 20 23

Notary Public, State of Florida

HARLEY KOMAR
Notary Public - State of Florida
Commission # HH 89965
My Comm. Expires Feb 8, 2025
Bonded through National Notary Assn.

Harley Komar
(Printed Name)

My commission expires: Feb 8, 2025

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: Treesources, LLC

Authorized Signature: _____

Print Name: Ian Wogan

Title: Owner

Date: November 27th, 2023



local

DocuSign Envelope ID: 148FF926-E42E-401B-AA35-C7A9B59540DA

EXHIBIT "E"

CRITPAT-01 SSIMEON

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Collinsworth, Alter, Fowler & French, LLC
8000 Governors Square Blvd
Suite 301
Miami Lakes, FL 33016

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No): (305) 362-2443
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Evanston Insurance Company	
INSURER B : Ohio Casualty Company	
INSURER C : Fire Mercury Ins. Company	
INSURER D : Association Insurance Co.	
INSURER E :	
INSURER F :	

INSURED

Subcontractor Template

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	X COMMERCIAL GENERAL LIABILITY	X					DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
	CLAIMS-MADE X OCCUR						MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS / X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	$
	X EXCESS LIAB CLAIMS-MADE						AGGREGATE	$
	DED X RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N						X WC STATU-TORY LIMITS / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A					E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1000,000.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

...t No. & N... 447PF0321C0001 C. Clyde Atkins Courthouse Lobby Expansion and Security Enhancement
...330 Crandon Blvd, Ke... ...ne, FL 33149 Park ... FL 33128

...named as ad... ...ds in rega... ...required by ... ...applies ...
regard to General Liability when required by written contract. Pollution & Umbrella in regards to operations being performed by the Insured.

CERTIFICATE HOLDER

CRITCAL PATH SERVICES, INC.
PO BOX 330429
MIAMI, FL 33233

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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CITY OF OPA-LOCKA
DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Ian Wogan (Name) the Owner (Title/Position) of Treesources, LLC (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

11/27/23
Date

Signature

CITY OF OPA-LOCKA
NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA - COUNTY OF MIAMI DADE

Ian Wogan being first duly sworn, deposes and says that:

(1) He/She/They is/are the Owner (Owner, Partner, Officer, Representative or Agent) of Treesources, LLC the PROPONENT that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPONENT nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPONENT, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPONENT, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPONENT, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPONENT, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPONENT or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

Alex Held
Witness

KEITH CLOUGHERTY
Witness

By: _____
Signature

Ian Wogan, Owner
Print Name and Title

The International Society of Arboriculture

Hereby Announces That

Ian Wogan

Has Earned the Credential

ISA Certified Arborist ®

By successfully meeting ISA Certified Arborist certification requirements through demonstrated attainment of relevant competencies as supported by the ISA Credentialing Council

Caitlyn Pollihan
CEO & Executive Director

25 February 2014	30 June 2026	FL-6594A
Issue Date	Expiration Date	Certification Number

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17024
PERSONNEL CERTIFICATION BODY
#0847
ISA Certified Arborist

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Proposer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature _____

Printed Name Ian Wogan

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

TREESOURCES, LLC

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☑ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

3109 Grand Avenue, #297

Requester's name and address (optional)

6 City, state, and ZIP code

Miami FL 33133

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–			–				

or

Employer identification number

8	5	–	0	5	3	6	2	0	4

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	**Signature of U.S. person** ▶		**Date** ▶ January 5th 2023

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*



PROPOSAL
Opa-Locka, Florida
Citywide Urban Forest Plan

11.28.2023

Rachel Comte, Principal, Urban Canopy Works, LLC
817 Dayton Street, Newport KY 41071 | 859-638-2044 | rachel@urbancanopyworks.com

urbancanopy works, LLC

SBA WOSB CERTIFIED

DUDEK

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Letter of Transmittal

November 28, 2023

City of Opa-Locka
Office of the City Clerk
780 Fisherman Street, 4th Floor
Opa-Locka, Florida 33054

To Proposal Review Team:

Urban Canopy Works (UCW) is excited to submit to the City of Opa-Locka, Florida the following proposal for the *Opa-Locka Urban Forest Plan*. We have partnered with Dudek, an environmental, planning, and engineering firm, to bring a full suite of expertise to this project. This letter and subsequent proposal documents our team's approach, scope of work, fees, timeline, expertise and experience.

Project Approach

While a more specific Scope of Work can be found in the next section, we want to first highlight four aspects of an approach and philosophy that the UCW team plans to apply to *Opa-Locka's Urban Forest Plan*. We have developed an approach to ensure that the Opa-Locka project is:

Equity-centered and community-focused to be easy for the public to understand and engage in for the foreseeable/ongoing future. It is encouraging to see that Opa-Locka is already prioritizing this community-based approach. We must maintain this community engagement focus throughout the plan. To do this, we have developed a process that:

- Creates a channel for **two-way communication and education between all parties** throughout the progress of plan development.
- Uses terms **understandable by all** (not technical jargon), and incorporates a multilingual approach. Urban forests are for real people, not just those in the "tree world."
- **Connects the urban forest to what people really care about** - creating a healthier, safer and more connected environment for Opa-Locka residents.
- Creates **tangible goals that mean something to the community**, and thus spur action during plan implementation and beyond.

Experienced in Florida urban forestry. Our experience includes a number of communities in Florida specifically, and familiarity with state law and local tree species.

Based on solid communications practices. The UCW team has proven expertise in urban forestry strategy planning, and will use that expertise to analyze and assess Opa-Locka's urban forest. However, *we are also experts in communications and facilitation*, which is as (if not more) critical in urban forestry planning, especially knowing that the majority of tree canopy is usually privately owned. This is an area we see as

lacking in many planning efforts, yet it is critical to real progress in the coming years. For this reason, we are proposing to produce the following as part of this initiative:

- A more **educated and engaged community** ready to dive into implementation at the completion of this effort.
- **A media and engagement outreach strategy that works for everyone.** Website content is an important part of this strategy and will be included, but web-based engagement doesn't work for all members of the community.
- **Focused on unique needs of the Opa-Locka climate**, now and in the future, trees are one of the most effective ways to reduce urban temperatures, decrease air pollution, and increase quality of life in cities.
- A **better understanding of the existing urban forest** itself - what we have now and what we want to achieve. This includes examining not just the trees themselves (via canopy cover and inventory data), but also what the community sees and what they want for the future of Opa-Locka.
- A **clear path forward** covering a long-term time frame (with 3-5 year measurable benchmarks). This includes defining community goals, and a well-defined path to work toward those goals.

Dedicated time and resources to this project. The founders of UCW left large corporate consulting firms to start the company specifically to be able to dedicate their time and focus on fewer clients. This allows us to understand and address the unique needs and issues that matter most to the people that live there, doing better work for each community. Together with Dudek staff, our team will put the Opa-Locka project first throughout the project timeline.

This approach will create a plan process and final product best suited to Opa-Locka's needs and desires (as expressed in the Request for Proposal). Each of these key aspects are interwoven throughout the full Scope of Work.

The Team

UCW will be the lead working through all aspects of the project, with our partner Dudek managing the canopy analysis and public outreach efforts.

About Urban Canopy Works

Urban Canopy Works (UCW) is a women-owned, Cincinnati-area based small business dedicated to the advancement of trees and the tree canopy in our urban and developed areas. We connect our passion for trees with a clear sense of purpose about our work. We are dedicated to contribute, serve others, and make a difference. We have years of experience working in multiple states helping communities with urban forest planning efforts.

The UCW team is ISA Certified and has been leading urban forestry planning initiatives for over 10 years across the country. We commit to be responsive to the City of Opa-Locka's needs and can deliver customized solutions based on our extensive experience in urban forestry.

About Dudek

Dudek assists municipalities on a broad range of projects that improve communities, infrastructure, and the natural environment. From planning, design, and permitting through construction, we move projects

through the complexities of regulatory compliance, budgetary and schedule constraints, and conflicting interested parties. We have a long history of providing environmental services to municipalities and have experience in the local environmental resources and agency policies pertaining to resource management, development impact assessment, and mitigation.

Dudek offers clients a diverse urban forestry practice with expertise in a variety of urban and wildland forestry specialties. Our certified and licensed arboriculture and forestry professionals bring experienced, valuable insight to tree management issues, providing creative approaches to difficult and controversial projects. Among our specialties are urban forest master plans (UFMPs), arborist and forester reports documenting tree assets within a project area, health and condition assessment reports, and appraised value reports; we also offer training on tree maintenance and pruning.

Dudek has built a reputation for providing exemplary environmental, planning, regulatory, engineering, construction management, operations, and funding expertise, offering municipalities a cost-effective way to accomplish short- and long-term goals.

General Information on Each Firm

Urban Canopy Works, LLC
817 Dayton Street
Newport, KY 41071
Business Hours: Monday - Friday 9-5 EST

UCW is a single member LLC founded in 2018, based in the State of Kentucky, working nationally.

Primary Contact: Rachel Comte, Owner, 859-638-2044 or Rachel@UrbanCanopyWorks.com
Secondary Contact: Mindy Mohrman, Consulting Urban Forester, 850-559-4653
Mindy@UrbanCanopyWorks.com

Dudek
605 Third Street
Encinitas, CA 92024
Business Hours: Monday - Friday 9-5 PST

Dudek is an employee-owned firm based in the State of California, with offices nationwide, including one in Lake Worth Beach, FL.

Primary Contact: Ryan Allen, Principal in Charge
760.942.5147 or rallen@dudek.com

License number: F19000002431
Issue date: 5/21/2019. UCW will also register with the state if a contract is awarded.

The following pages contain our proposal for working with the City of Opa-Locka to develop the Urban Forest Plan. With the help of our team of forward-thinking, community-focused experts, UCW will be able to guide the Opa-Locka community through this important initiative.

Sincerely,



Rachel Comte
Owner, ISA Certified Arborist, Urban Planner
ISA Certified Arborist/TRAQ - OH-6296A

Scope of Work

The following scope of work is based on UCW's understanding of the goals that the City of Opa-Locka has expressed for their *Urban Forest Plan* (UFP). Using the available data and resources combined with our experience and knowledge in municipal arboriculture, urban planning, and public engagement, UCW proposes to develop the UFP in three phases - Project Launch, Discovery, and Plan Development. These phases incorporate all the elements discussed in the RFP Scope of Services, and are described in more detail below.

Phase 1: Project Launch

Task 1 from the RFP Scope of Services

This planning and kick off phase begins the project with a series of tasks:

- **Internal Kick Off Meeting (virtual).** Once under contract, UCW will set up an initial Zoom call between the City of Opa-Locka and the UCW team for introductions, to talk through project schedules, benchmarks, communication protocols, and understanding of expectations. We will also coordinate any logistical items, define a steering committee, set regular project management meetings (monthly), and start the conversation on each of the items below.
- **Information and Data.** Initiation of the process of information exchange and data sharing, including canopy and tree inventory data, any relevant city or regional plans, information on existing and past programs, etc.
- **Website Content.** Initial online project content will be developed, to be hosted on the City's website. Content will be updated regularly throughout the project (described further in the Discovery phase).
- **Engagement Planning.** As a group (UCW team and City), we will work together during this phase to further refine and plan out specifics for a strategic public outreach plan. The plan will serve as a roadmap, highlighting strategies and tasks designed to help the City of Opa-Locka achieve the project's public outreach goals and objectives. Our team will also develop and maintain a stakeholder database throughout the project's duration. This database will include stakeholder name, contact information, preferred method of contact, and potential key concerns and/or areas of project interest. Additionally, a comprehensive database of additional contacts will be developed, including neighborhood and homeowners' associations, businesses schools, and cultural organizations, advocacy groups, and community-based organizations.

Phase 2: Discovery

Tasks 2 and 3 from the RFP Scope of Services

This phase is a significant portion of the work and involves not just analyzing facts and figures, but going beyond the hard data to learn and gain insightful perspectives from the community. UCW believes in community engagement as a critical part of information gathering, issue solving, and goal-setting. The creativity and power that comes from involving others with diverse backgrounds and perspectives has

proven to make urban forest management planning projects more successful by being responsive to the real needs and desires of the community.

In our experience, proactive, responsive urban forest management planning initiatives begin with asking citizens and internal and external stakeholders probing questions on their biggest challenges, what is going well in Opa-Locka, what is missing, and what the definition of success might look like. By obtaining this kind of input, the UCW team works to ensure that the City's plan "leads with a need." This phrase, and the upfront, transparent, honest community engagement it represents, is critical to ensuring that the resulting *Urban Forest Plan* is both inclusive and responsive to the citizens' needs, as well as addressing the needs of the urban forest itself.

Discovery happens in multiple ways - through data and statistical analyses, group stakeholder engagement, targeted one-on-one interviews, and broader public engagement efforts, each described in more detail below.

Review and Analysis of Existing Information/Data

Multiple existing data sources will be used to assess the existing urban forest, as well as start to uncover gaps in knowledge.

Assess City Policies and Documents. UCW will review the City's comprehensive plan, climate action plan, and municipal code, along with any other relevant planning documents or efforts. We will examine the existing tree protection code, including development code / zoning regulations and procedures as well as any other policies, guidelines, specifications or standards in place that impact trees in Opa-Locka. Review of these policies and regulations will look for gaps or changes that can be made to aid in reaching overarching urban forestry goals. Interviews will be conducted as part of the engagement work described below.

Operations Reviews. UCW will conduct a comprehensive review of the internal plans and operations including resources, budget, and staffing structure of relevant departments that impact the management of trees to look for areas of improvement, best roles, opportunities for partnership, and potentially additional funding sources.

City of Opa-Locka Public Tree Inventory. Data on Opa-Locka's publicly-owned trees will be used to examine species and age diversity, as well as challenges in conditions or suitability (based on availability of data), and management needs.

Planting Strategies. Existing planting practices of the City, and other potential players, will be examined. Potential planting strategies for Opa-Locka will be explored based on potential planting areas identified in the Urban Tree Canopy Analysis to address the priority concerns of climate change and equitable distribution of canopy.

Canopy Cover Analysis. Our team (led by Dudek) will conduct a canopy analysis that includes all trees within City limits, including public and private property, open space, natural resource areas, creek and riparian areas, golf courses, and other areas defined by the project team and the City. This analysis will focus on the City's existing canopy cover, which consists of the area of the City covered by trees when viewed from above. For this task, Dudek will utilize publicly available canopy and land use data generated by using GIS layers from Miami/Dade County's Urban Tree Canopy Assessment. High resolution spatial imagery will be used to assess all land cover classification types including trees, shrubs, bare earth, impervious surfaces, and water.

The resulting canopy cover study will provide information on the distribution of trees and tree density on all identified study areas and analyze whether trees are equitably distributed throughout the City.

Equity and Tree Canopy. The first step to developing a sustainable urban forest that achieves equitable canopy cover will be to determine areas of the City where tree resources are needed and where an injection of these resources would provide the greatest community net benefit. To determine these areas, our GIS specialists will overlay the UTC with data provided by the City, such as heat exposure areas, disadvantaged communities, council districts, and land use types. These data will inform the analysis and help determine if specific areas are lacking tree canopy and whether these deficits are impacting certain parts of the community more than others. Strategic areas for tree planting opportunities will be identified. The City's Tree Equity Score will be calculated using a method developed by the nonprofit American Forests which evaluates existing tree canopy, population density, income, employment, race, age, and surface temperature data at the neighborhood scale.

Impact of Climate on the Sustainability of Opa-Locka's Trees. UCW will utilize the U.S. Forest Service's climate models (Tree Atlas) along with available tree data to determine how the impact of a warming climate is expected to change the makeup of Opa-Locka's trees under various climate change scenarios.

Community Engagement

UCW and Dudek are proposing multiple activities to engage the public during development of the plan. Dudek will take the lead on most of the content creation and public engagement. UCW will take the lead on the Stakeholder workshops.

Steering Committee. Our experience has shown that it is most effective if the community-at-large is involved in the plan's development from the beginning, and not just simply in engagement events or to help during the post-plan implementation work. Described already in Phase I - Project Launch, UCW will work with the City to establish a steering committee of stakeholders as yet another avenue to engage the community throughout the UFP process. This team often becomes highly invested in the plan, will spearhead implementation, and can leverage financial and political support for recommended action steps.

Two Groups in Engagement Defined. Our experience has shown that it is valuable to engage the community on a variety of levels. We use the term *Stakeholders* and *Broader Public* to describe two primary groups to create engagement during the UFMP process, as defined below.

Stakeholders are considered members of the community that directly engage with trees or the natural environment in their professional or leadership roles, often as part of an entity or organization. Example: Citizen Committees, representatives from neighborhood groups, relevant City staff, representatives from community non-profits, utilities, educators, elected officials, County staff, representatives from the local development industry, landscape architect trade group, and anyone else that may engage with trees on a regular basis.

Broader Public is a term we used to refer to any Opa-Locka resident that is interested or has perspective to provide.

One-on-One Interviews. A series of 15 one-on-one interviews (virtual) with select stakeholders is also an important part of the Discovery process, allowing for individual conversations that often reveal additional and important information and lead to new ideas.

"Discovery Through Self Assessment" Stakeholder Workshops (3). Discovery also occurs through open, facilitated discussions with stakeholders. The UCW team will utilize the stakeholder database developed during project launch to plan these workshops. We have found that a series of sequential two hour workshops is most effective.

Each workshop is structured to spend a small portion of the time reviewing and explaining findings from data/plan analyses and sharing examples of what other communities are facing and how they are taking action. The primary use of the workshop time, however, is to hear directly from the stakeholders about

existing challenges and hurdles facing Opa-Locka, priorities and goals for the future, and dreaming and brainstorming imaginative solutions to these challenges - all led by a trained facilitator.

These workshops (together with the data analysis previously detailed) provide a systematic and guided method for the community to self-evaluate how sustainable Opa-Locka's urban forest is. UCW uses a matrix (at right) that can aid in assessing the sustainability of an urban forest. This matrix, once completed, will also serve to develop benchmarks to measure the future progress of the action steps in the master plan.

Indicators of a Sustainable Urban Forest		Assessed Performance Level		
		Low	Mod.	Good
The Trees	Urban Tree Canopy Cover			
	Equitable Distribution			
	Age Distribution			
	Condition of Publicly Owned Trees			
	Condition of Publicly-Owned Natural Areas			
	Trees on Private Property			
	Diversity / Pest Vulnerability			
	Suitability - Overhead			
	Suitability - Ground Level			
	Suitability - Soil Conditions			
	Suitability - Invasives			
	Suitability - Cllimate Change Adaptability			
The Players	Neighborhood Action			
	Large Private Landholder Involvement			
	Green Industry Involvement			
	City Department/Agency Cooperation			
	Funder Engagement			
	Utility Engagement			
	Developer Engagement			
	Public Awareness			
	Regional Collaboration			
The Mgmt Approach	Tree Inventory			
	Canopy Assessment			
	Management Plan			
	Risk Management Program			
	Maintenance of Publicly-Owned Trees (ROWs)			
	Planting Program			
	Tree Protection Policy			
	City Staffing and Equipment			
	Funding			
	Disaster Preparedness & Response			
	Communications			
		0	0	0
	Totals	0%	0%	0%

Each stakeholder workshop has a unique, but sequential topic, and is focused on accomplishing specific goals:

- *Workshop 1: The Trees.* The first workshop starts to delve into the data, first looking at what is known about the trees and tree canopy. Then group discussion follows to explore the challenges facing Opa-Locka in this area, brainstorming on potential solutions, and starting to tease out future goals from the group.

- *Workshop 2: The Players.* The second workshop focuses on the human element - both those individuals active in the urban forest and those within the community who are not yet engaged or are under-represented. Group discussion often centers on how to better engage the community.

- *Workshop 3: The Management Approach.* Finally, the last workshop delves into the management approach, which is heavily focused on local management practices and policies. This last workshop often includes discussions on broader topics that have emerged throughout the discovery process overall.

Our job during this phase is to *facilitate* the community's exploration of the issues and aid in developing imaginative solutions with all those involved. Our team will encourage and support this discovery phase with expertise in arboricultural and urban forest management best management practices. We will frame and bring context to Opa-Locka's issues with our knowledge of what challenges other cities in the country are experiencing and what solutions they are pursuing.

Reaching the Broader Public

Public outreach is key both in the development of a plan, but also to facilitate implementation after a plan has been completed. The public engagement plan is flexible, and we can talk about options together once we get started. At first glance, UCW and Dudek is proposing the following efforts:

Website. Website content will be a critical component of a robust outreach plan. This material will be developed by Dudek and will provide accurate and timely updates to inform community members of important project information and opportunities to provide input throughout the project. Community members will be able to access project information, such as FAQ's, maps, and a schedule, as well as the opportunity to provide their contact information to receive electronic project updates. The content will be updated on an ongoing basis throughout the project, and can ultimately be used to house the final plan and provide a place to monitor/ track progress in the coming years.

Community Outreach Materials. Our team's marketing and graphics experts will prepare multilingual outreach materials that will communicate the value of the City's urban forest through infographics. With input from key stakeholders and the City, we will identify strategic media outlets for these outreach materials such as social media, e-newsletters, local television, newspapers, and other venues to engage the public in the UFP process.

Social Media. Our team's marketing and graphics experts will create social media content for the City to disseminate information about the UFP process and public engagement opportunities. Social media content will be uniquely designed to fit the City's branding.

Public Meetings. Engaging the community at in-person events helps the consulting team better understand public perspectives and priorities related to tree and urban forest management. In-person outreach efforts will be open to all, and specifically targeted to communities who experience challenges in participating in web-based outreach activities, such as a virtual meeting or online survey. Our team will work with the City and interested parties to identify and reach these communities through existing public events, such as a farmers' market, community events, or neighborhood association meetings. Dudek will support these events by coordinating with the City and providing outreach and engagement materials. *The City will provide staff or coordinate volunteers to attend the events in-person.*

We recommend four (4) public outreach events. The first two (2) outreach events are recommended to be held during the initial information gathering phase of the project to better understand the community's interested parties' opinions of trees and provide information about the UFP process. Hard copies of the online survey will be made available for in-person engagement. The second round of two (2) public outreach events will occur during the public comment period of the draft UFP and will highlight the UFP's key findings, guiding principles, and the strategic plan for future urban forest management, to encourage discussion and feedback of the Plan findings and goals.

These engagement events ensure reflection of community values in the UFP prior to finalization, allowing for adjustment once a draft is developed. Interested parties will be encouraged to provide written comments to further refine the draft UFP. Following the public outreach events, we will deliver a summary report to the City on the public input received.

Online Survey. Online surveys typically result in significantly higher public input than surveys conducted during community meetings. As such, we will develop a multilingual online survey using the SurveyMonkey platform. Questions will consist of topics related to urban forest values, perceived benefits of trees, and ways the City can support community tree planting efforts. Demographic questions will be included to assess whether the survey is equitably distributed and representative of the City's community members. If

desired, Dudek will work with the City to distribute paper surveys to a random sample of households to gain input from residents that may not have access to the internet. Results of the surveys will be compiled in an electronic file, summarized, and included in the UFP. The City will be responsible for promoting the survey to collect as much input as possible.

Public Input from Previous City Initiatives. Our team is aware that any previous planning efforts that have taken place in Opa-Locka included a public input component. We are aware of the public's "planning fatigue" that can result from ongoing engagement. For this reason, UCW works to access input already provided by the public through other City plans. This can be relevant to an urban forest plan as trees play a significant role in reaching sustainability and livability goals, which is often a topic in city plans.

Phase 3: Plan Development

Task 4 from the RFP Scope of Services

In this last phase, the findings from the data analysis, document review, stakeholder workshops, interviews, and other public feedback are synthesized to create plan goals and an initial draft of the proposed plan narrative and recommendations, which will be presented to the City of Opa-Locka and select stakeholders for review, amendment, and approval.

Goal Setting. The purpose of this strategic plan is to reach key goals, based on the knowledge of the urban forest as it exists today and as defined by the community during the discovery process. The path forward will include goals that are measurable and achievable and address the issues and desires identified by the City and community. We will gather as a group, virtually, to review canopy data and develop goals based on key performance indicators such as long- and short-term tree planting scenarios and metrics required to achieve a canopy cover goal. The focus will be on ensuring that distribution of canopy is equitable, addresses climate change concerns, and mitigates heat impacts through maintaining and growing a healthy urban forest.

Narrative & Recommendations. At this point of the strategic planning process, the UCW team will take the newly set goals, together with findings, challenges, opportunities, potential resources and other feedback from the Discover work and develop a "Plan Narrative & Recommendations" document. This is a 3-5 page document that will summarize the story we propose telling in the plan, along with a set of recommendations or action steps to reach the plan goals. This will include management recommendations for better urban forest health and more efficient operations, and recommendations for ongoing community input and education. This can be reviewed and feedback provided by the Opa-Locka team. This document must be approved before work can begin on writing the full plan itself.

Plan Creation. Once both the Goals and Narrative & Recommendations are approved, we will begin the process of writing the full plan. This will take the form of two documents. The official plan, which will be a concise summary of findings, goals, and action steps, and written as succinctly as possible, using terms that the lay person will understand, tying trees to real-world concerns facing Opa-Locka residents. A longer accompanying "supporting document" will document all the detailed findings, detailed recommendations, etc.

Editing Process. A draft of the final plan will be presented to the City and other selected stakeholders for review. There are two rounds of edits included in this project. The Opa-Locka team is required to compile all edits into one version before submitting to UCW to implement changes.

Formatting. Once text edits are complete and final, the concise plan (estimated 20 pages) will be formatted in a graphic-heavy, easy-to-absorb, magazine like format (inDesign). The supporting document (60+ pages) will be formatted in Word.

Deliverables: Along with an electronic version of the final UFP and Support Document, the City will receive all PowerPoint presentations and meeting materials that were created, as well as any applicable data tables, mapping, and benchmarking information.

Fee Schedule

The cost as detailed in the Scope of Work are as follows:

Project Phase	UCW	Dudek	Total
Phase I: Project Launch	$3,000	$2,000	$5,000
Phase II: Discovery	$45,000	$20,000	$65,000
Phase III: Plan Development	$22,000	$8,000	$30,000
Totals	$70,000	$30,000	**$100,000**

The lump sum above includes all materials detailed, as well as travel expenses (flights, hotels). Work will be billed on a monthly basis based on percentage completed for each phase.

Hourly Rates

Rachel Comte (UCW) - $150/hr
Mindy Mohrman (UCW) - $150/hr
Ryan Allen (Dudek) - $210/hr
Rachel Conway (Dudek) - $125/hr
Alexandria Reed (Dudek) - $135/hr
Curtis Battle (Dudek) - $165/hr
Sarah Davidson (Dudek) - $120/hr

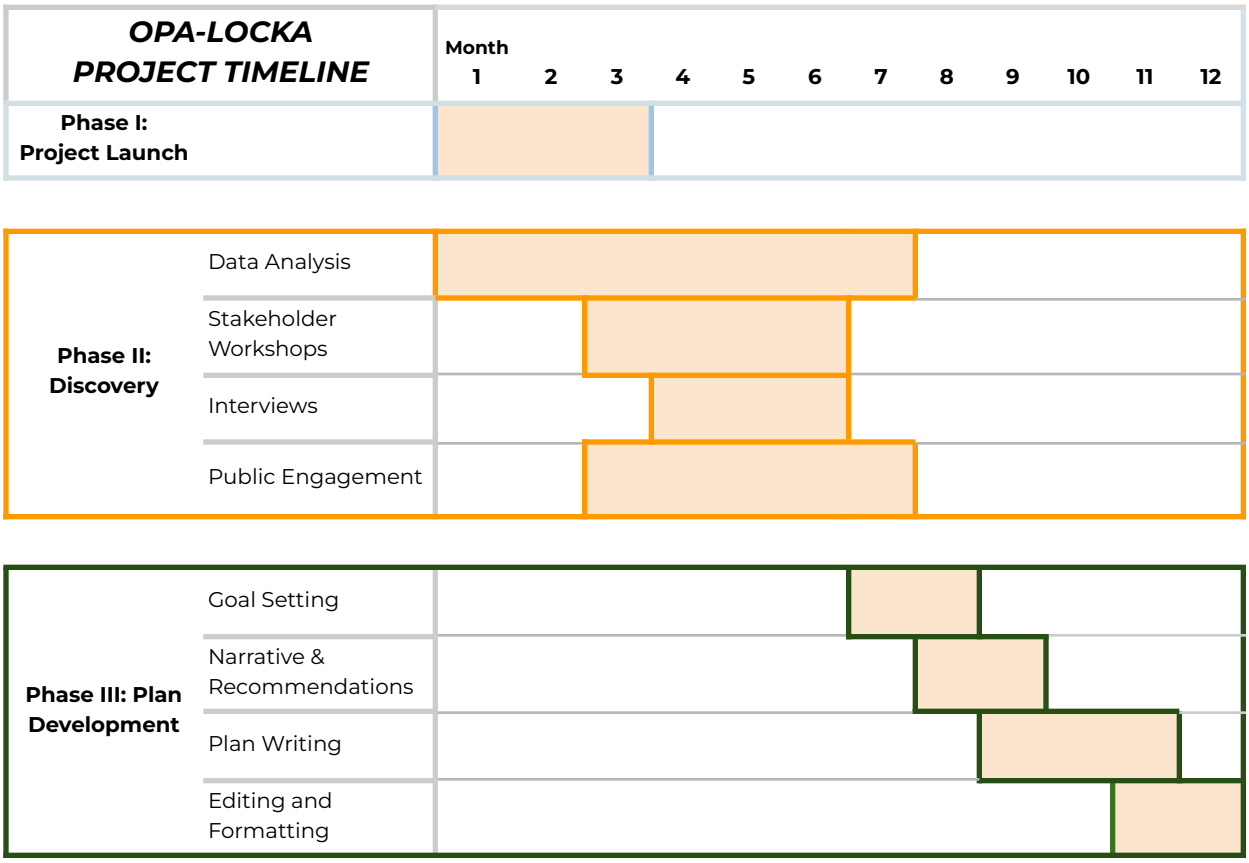
Client Responsibilities

The fees for this planning project are based on the City of Opa-Locka performing the following:

- Provide or otherwise make available all urban forestry data, budgets, GIS mapping, plans, reports, and relevant information at no charge and preferably in electronic format.
- Lead the invitation process for all stakeholders and interviewees.
- Handle all logistics for stakeholder and public meetings in terms of sending announcements/invitations, securing the meeting rooms, providing audio-visual equipment, providing refreshments (if desired), printing meeting materials, etc.
- Handle promotions for the survey and other engagement opportunities for the community.
- Staff public events with City staff or volunteers, utilizing material provided by consultants.
- Review the draft of narrative and plan and otherwise coordinate with UCW to be sure that the plan fills the City's expectations.
- Ensure all edits are submitted back to UCW in one combined document (multiple versions of edits will not be accepted) and done so in as timely a manner as possible.

Timeline

The following is a suggested timeline for the Opa-Locka project spanning a period of one year.



A few points to note regarding the project timeline:

- This can be adjusted based on the needs of the City of Opa-Locka and adjustments to scope.
- Holidays in November and December can significantly slow the progress of any project.
- Speed of the editing process timeline depends heavily on City's bandwidth to review and return edits in a timely manner.

UCW Team & Experience

UCW has teamed up with Dudek, an environmental, planning, and engineering firm headquartered in Encinitas, California. Our team of experts for this project will be responsive to the needs of the City of Opa-Locka and their partners and can deliver customized solutions based on our extensive national **experience in urban forestry strategic planning** and established **communication, outreach and facilitation skills**. Our full team is detailed in the UCW Team & Experience section of this proposal.

Project Team & Roles

Our team is made up of dedicated professionals with extensive experience in their respective fields. The core team members for this project will include both the talented UCW team members and select skillful partners**.**

- **Rachel Comte, principal of Urban Canopy Works**, will be the primary project lead and work on all aspects of the project.

- **Mindy Mohrman, consulting urban forester and urban planner at Urban Canopy Works,** will lead the discovery and analysis efforts of Opa-Locka's urban forest resource data and will review the management approach, regulations, structure and resources of the City. This includes conducting internal and external stakeholder interviews, participating in the public input process, and contributing to writing the final plan.

- **Ryan Allen, principal in charge at Dudek**, will lead the Dudek team of experts in the UTC analysis work, as well as outreach efforts, including developing the engagement plan, public meetings, media outreach, community outreach materials, and the online survey.

All team members will work together at the conclusion of the discovery phase to develop the plan itself in the final phase.

Team Profiles

RACHEL COMTE
Principal, Urban Canopy Works
ISA Certified Arborist/TRAQ, Urban Planner

Rachel Comte is an ISA Certified Arborist (TRAQ), urban planner, trained facilitator and communications expert. She is a leading authority on urban forestry master plans based on 10 years experience developing plans for cities across the United States. Rachel is passionate about making cities better, healthier places for people to live, and a substantial vibrant tree canopy is an essential part of this work.

Prior to founding Urban Canopy Works, Rachel served as the lead for urban forest master plans at Davey Resource Group. Between both organizations, she has managed the urban forestry master planning process for Boston (MA), Cleveland (OH), Columbus (OH), Charlotte (NC), Greenbelt (MD), Largo (FL) among others. She also led the Tree Canopy Action Plan policy project for the City of Charlotte (NC), managed in-depth urban tree canopy analysis projects for Louisville/Jefferson County (KY) and for Lexington-Fayette County (KY), and managed a large multi-year tree planting contract for the City of Philadelphia. Rachel performs tree risk assessments for the US Capitol Grounds every year, and serves as a consulting urban forester for multiple municipalities in the Cincinnati metro area.

Prior to her urban forest management experience, Rachel served in diverse roles throughout her career. She has almost 30 years' combined experience in project management, strategic marketing, consulting, landscape design, green infrastructure, and planning and urban forestry and has worked in the private, public and not-for-profit sectors. Starting in project management and marketing in Washington DC for a business lobby, she later held positions in the private sector in online marketing and communications, and served at the White House as a Special Projects Officer. Rachel transitioned into environmental planning after completing a graduate degree in urban environmental planning while working for a regional planning commission. She also worked for a non-profit to clean and plant abandoned urban lots to end blight and

encourage redevelopment. Rachel has conducted research in natural resource issues like economic impacts of restoring urban waterways, impact of fracking on communities, trends in land conservation, and trees' impact on stormwater mitigation.

Learn more about Rachel at www.urbancanopyworks.com/rachel-comte.html.

MINDY MOHRMAN
Consulting Urban Forester, Urban Planner at Urban Canopy Works
ISA Certified Municipal Arborist/TRAQ

Mindy Mohrman is an ISA Certified Arborist/Municipal Specialist and an Urban Forester and Urban Planner with 20 years of experience serving as a City Forester and Urban Planner in local governments. She focuses her work on practical, real-world solutions that achieve long term positive results. Mindy is a passionate believer that planning space for trees as part of the fabric of a city improves quality of life, defines a unique sense of place, and provides substantial health benefits.

Prior to joining Urban Canopy Works, Mindy served as the Urban Forester and Administrator of Comprehensive Planning for the Tallahassee-Leon County Planning Department in Tallahassee, Florida. There, she implemented comprehensive, long term urban forestry and natural resource programs and policies, including the development and implementation of the City's first Urban Forest Master Plan. Prior to Tallahassee, Mindy served as the Urban Forester for the City of Chesterfield (MO), where she implemented the City's first public tree inventory, street tree management plan, street tree planting program, and emerald action borer action plan. She has gained years of experience reviewing, revising, and improving tree preservation and planting code regulations and policies, including performing public outreach and engagement to ensure that the results of these regulations provided the benefits most important to the community.

Learn more about Mindy at www.urbancanopyworks.com/mindy-mohrman.html.

RYAN ALLEN
Principal in Charge, Dudek
ISA Certified Municipal Arborist/TRAQ

Ryan Allen is an urban forester with 15 years' experience providing strategic environmental planning to organizational programs. Mr. Allen's work deepens the positive impact on the communities he serves and increases organizational capacity. Mr. Allen has experience working with elected officials and staff and building and maintaining strategic partnerships. Mr. Allen is the practice lead for Dudek's Urban Forest Management Planning team, which has a goal to create a "healthy urban forest for our future." Since 2018, Mr. Allen has led the development of urban forest plans throughout California, including Los Angeles County, Fresno, Rancho Cucamonga, Alameda, San Mateo, Salinas, Temecula, and many others.

ALEXANDRIA REED
Data Scientist, Dudek

Alexandria Reed (she/her) is a data scientist with 5 years' professional experience as an environmental consultant specializing in data-driven environmental analysis, data visualizations, compliance, and project management. Ms. Reed is adept at utilizing statistical analysis, geospatial tools, and machine learning techniques to inform decision-makers and address complex environmental challenges. Her expertise

extends to utilizing R and GIS software for spatial data analysis, enabling the calculation of tree canopy cover and the creation of customized map layers for tree inventory systems. Furthermore, Ms. Reed plays a pivotal role in offering technical data support for a wide range of projects, including those related to urban forestry, wildlife distribution, water quality, and preliminary environmental analysis reports.

RACHEL CONWAY

Community Outreach Specialist, Dudek

Rachel Conway (RAY-chul CON-way; she/her) is an environmental scientist with 3 years' experience in urban forestry. She is experienced in all aspects of implementing tree planting programs from navigating city permits, planning, maintaining trees, and report gathering. She also assisted in the development of the City of New Orleans Urban Forest Master Plan. Ms. Conway has a wide skill set in urban forest data analysis, community engagement, environmental education, and climate change.

SARAH DAVIDSON

Creative Designer, Dudek

Sarah is a creative designer with 6 years' experience creating visually captivating work. Ms. Davidson's capabilities include publication layout, branding, illustration (including scientific and archaeological illustration), print work, social media, and other creative marketing collateral. Ms. Davidson has extensive experience working alongside environmental projects, specifically on projects with cultural and paleontological sensitivity. She has experience working on projects for City of Rancho Cordova, City of La Mesa, City of San Diego, and more. As a marketing professional, Ms. Davidson's goal is to create aesthetically appealing collateral that tells a visual story, while succinctly providing data and information.

CURTIS BATTLE

GIS Technician

Curtis Battle is a geographic information systems (GIS) technician with 11 years' experience in a wide variety of GIS platforms and techniques. Mr. Battle has expertise in ArcMap, ArcCatalog, and ArcPad; Trimble, Spectra, and Garmin GPS platforms; geodatabase construction and maintenance; quantitative geographic methods; cartography; species distribution modeling; remote sensing fundamentals and methods; Python programming; and cartography. He has provided GIS support for numerous environmental impact reports (EIRs); technical studies, including biological technical reports, vegetation mapping, and wildlife surveys; mitigated negative declarations; preliminary environmental analysis reports; initial studies; and mitigation monitoring and reporting programs.

Representative Projects

Knoxville (TN) Urban Forest Master Plan

Project Website: KnoxvilleTreePlan.org
Contact: Kasey Krouse, Urban Forester, City of Knoxville, 865-215-6113, kasey@knoxvilletn.gov
Project Length 14 months

The City of Knoxville has seen significant changes in canopy over the last ten years, and recognizes the value trees provide both in public health benefits and by reducing the effects of climate change, air pollution, and flooding. Trees Knoxville, a Knox County tree nonprofit organization, has partnered with the City of Knoxville, Keep Knoxville Beautiful, TN Division of Forestry and Knoxville Utilities Board, to lead the community in an urban forest master plan. This plan is currently in development, with expected completion in February 2024. More information can be found at the project website at www.knoxvilletreeplan.org.

City of Columbus (OH) Urban Forestry Master Plan

Project Website: ColumbusUFMP.org
Contact: Rosalie Hendon, Environmental Planner, City of Columbus, 614-724-3003, rfhendon@columbus.gov
Project Length 14 months

The City of Columbus made a decision to proactively manage, preserve and grow its urban forest through an urban forestry master plan (UFMP). This was a critical step for the city, especially in light of the exponential growth expected and existing public health challenges combined with a warming climate. At the time of the plan, tree canopy was not equitably distributed across the city, causing disparities in health, economic prosperity and overall quality of life. This plan was aimed at reversing this situation and providing more efficient and effective urban forest management services to citizens. This project engaged a 100+ member Advisory Group in multiple working meetings to assess the conditions of the existing urban forest and to determine the community's priorities. Input was also collected through the project website and a well-attended public open house. An internal operations review was conducted, as well as a full review of the policies, plans and codes in place.

Boston (MA) Urban Forest Plan



Project Website: City of Boston Website
Contact: Maggie Owens, Planner, City of Boston, 617-821-6884, maggie.owens@boston.gov
Project Length 15 months

In Boston, nearly 700,000 people depend on the many benefits provided by the trees in the urban forest. The Boston Urban Forest Plan is a strategic long-term investment in the health of the trees and canopy in Boston, and the City's diverse residents, and will likely have a regional effect. The development of an Urban Forest Plan was spearheaded by a team co-lead by Stoss Landscape Urbanism and Urban Canopy Works. UCW worked within a team to engage the public and City leadership in discovery and dialogue to improve Boston's urban forest, especially in the face of climate change and expected rise of heat and sea level. The entire project focused on building a plan with a primary lens of equity, based on science, and created and defined by the needs and desires of the community. This project was completed in 2023.

Final Thoughts

UCW delivers creative solutions to all our clients because of a simple and thoughtful approach we take to help cities and organizations define their vision and set their goals:

We **listen** first. You and your goals, needs, and mission are unique. We take the time to listen, ask questions, and learn from you so we can better understand the issues and focus on practical solutions.

Then **provide guidance**. Using our expertise and experience in combination with your insights and participation, we will guide you to find creative and strategic answers to your questions.

Ultimately, we **deliver creative and realistic solutions**. Because of the collaborative approach we take, our services are customized for you, your budget, and your resources. We deliver practical, realistic, and attainable solutions.

Together, Urban Canopy Works and Dudek will work with the City of Opa-Locka to lead the community through a process to develop and deliver an Urban Forest Plan that is guided by data, driven by community goals and concerns, and understandable and relatable to every resident.

URBACAN-01 TNORTON

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 9/21/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Trisha Norton
AssuredPartners-Bellevue/Maysville 179 Fairfield Avenue Bellevue, KY 41073	PHONE (A/C, No, Ext): (859) 292-7191 FAX (A/C, No): E-MAIL ADDRESS: trisha.norton@assuredpartners.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Twin City Fire Insurance Co	29459
INSURER B : Lloyds of London	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

Urban Canopy Works LLC
817 Dayton Street
Newport, KY 41071

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY							
	CLAIMS-MADE X OCCUR	X		33SBMAF0716	5/4/2023	5/4/2024	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:						HIRED NON OWNED	$ 1,000,000
A	AUTOMOBILE LIABILITY							
	ANY AUTO						COMBINED SINGLE LIMIT (Ea accident)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS			33SBMAF0716	5/4/2023	5/4/2024	BODILY INJURY (Per person)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
A	X UMBRELLA LIAB X OCCUR							
	EXCESS LIAB CLAIMS-MADE			33SBMAF0716	5/4/2023	5/4/2024	EACH OCCURRENCE	$ 1,000,000
	DED X RETENTION $ 10,000						AGGREGATE	$
							Gen Agg/ BI	$ 1,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N						PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
B	Professional Liabili			ATRPL24855901	5/4/2023	5/4/2024		1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: UFMP Implementation Services
City of Columbus is named as Additional Insured with regard to General Liability.

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
James C. Crawford

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CITY OF OPA-LOCKA
DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).

4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by Rachel Comte (Name) the Owner (Title/Position) of Urban Canopy Works, LLC (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

11/28/23 (Date) Rachel Comte (Signature)

PRICE PROPOSAL FORM

PROPONENT understands and agrees that the Contract Price is the lump sum to furnish and install all of the Work complete in place. Vendor's price will not be adjusted unless the CITY changes the scope of the Project after the Contract Date.

As such, the Vendor shall furnish all labor, materials, equipment, tools, superintendence, and services necessary to provide a complete, in place Project for the Proposed Price of:

LUMP SUM PRICE: $ 100,000

SUBMITTED THIS 28 DAY OF November 2023.

BID SUBMITTED BY:

Urban Canopy Works, LLC
Company

859-638-2044
Telephone Number

Rachel Comte - owner
Name of Person Authorized to Submit Bid

—
Fax Number

Signature

rachel@urbancanopyworks.com
Email Address

Owner/Principal
Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By: _____

Title: Owner, Urban Canopy Works

Sworn and subscribed before this

27 day of November, 2023

_____

Notary Public, State of ~~Florida~~ Kentucky

Brittany Schreiver

(Printed Name)

My commission expires: 6/7/26

BRITTANY M SCHREIVER
COMM. EXP. 06/07/2026
NOTARY PUBLIC
COMM#: KYNP43901
STATE AT LARGE, KENTUCKY

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subcompanies/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: Urban Canopy Works, LLC

Authorized Signature: Rachel Conte

Print Name: Rachel Conte

Title: owner

Date: 11/28/23

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

Print or type. See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Urban Canopy Works, LLC

2 Business name/disregarded entity name, if different from above
--

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☑ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
Exempt payee code (if any) _____
Exemption from FATCA reporting code (if any) _____
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
817 Dayton Street

Requester's name and address (optional)

6 City, state, and ZIP code
Newport, KY 41071

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number
[ ][ ][ ] - [ ][ ] - [ ][ ][ ][ ]

or

Employer identification number
8 2 - 4 8 5 2 0 6 5

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ▶ Rachel Conklin Date ▶ 9/26/23

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: Urban Canopy Works, LLC

   Address: 817 Dayton Street

   City, State, Zip: Newport KY 41071 Phone/Fax: 859-638-2044

2. Check One: Corporation ( ) Partnership ( ) Individual (✓)

3. If Corporation, state:
   Date of Incorporation: — State in which Incorporated: Registered in KY

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:
   Dudek License F19000002431 Issued 5/21/19

5. **Name and Title of Principal Officers** **Date Elected:**

Rachel Conte, owner	2018

6. The length of time in business: 5 years (UCW)
   43 years (Dudek)

7. The length of time (continuous) in business as a service organization in Florida:
   5 years (Dudek)

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka specification, during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s) - attached

Note: *Information requested herein and submitted by the proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to ensure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

State of Florida
Department of State

I certify from the records of this office that DUDEK, INC. is a California corporation authorized to transact business in the State of Florida, qualified on May 21, 2019.

The document number of this corporation is F19000002431.

I further certify that said corporation has paid all fees due this office through December 31, 2019 and that its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-fourth day of June, 2019

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

Secretary of State

Tracking Number: 2229380677CU

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

Sponsored By: Interim City Manager

RESOLUTION NO. 23-_____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING ISSUANCE OF A REQUEST FOR PROPOSALS ("RFP") FOR THE REHABILITATION OF LIFT STATIONS 9 AND 16, WITHIN THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Opa-Locka ("City") desires to issue a Request for Proposals ("RFP") for the Rehabilitation of Lift Stations 9 and 16, within the City; and

WHEREAS, the scope of work will consists of furnishing all materials, labor, and equipment necessary to Upgrade Sewage Pump Stations No. 9 and, 16, including, but not limited to, excavation, demolition, and modification work including Abandon existing dry well; Remove dry well chimney; Remove existing pumps, valves, piping, fittings, emergency discharge connection, existing sewer clean out plug, existing concrete slabs; existing wet well top slab; Remove and Replace in kind to match existing 6'(feet) chain link fence; Remove and Relocate as required: existing water meter and connect the line to existing service; existing RTU antenna, existing electric box, existing concrete slab for electrical service; Relocate as required existing back flow preventer unit and water faucet, existing plug valve; furnish, installation, operation, and removal of temporary sewage effluent by-pass pumps, equipment and accessories; and

WHEREAS, it will also be necessary for the Contractor to also install a wet well concrete top slab / new valve vault structure concrete and concrete top slab; furnish and install aluminum access hatches for wet well and valve vault and emergency connection; furnish and install new wet well protecting coating; furnish and install two (2) 2.68 HP submersible pumps and related equipment; furnish and install bubbler control system and related equipment; furnish and install new meter and main disconnect; furnish and install the proposed power/control system inclusive of the necessary electrical panel, enclosure, telemetry system, and related equipment; install electrical conduits and junction boxes; install R.T.U. panel and S.C.A.D.A. equipment furnished by the Department; electrical work; mechanical work: furnish all materials, equipment, and supplies necessary for pump stations startup and testing; furnish and install sewage force main pipe and fittings; connection to existing sewage force main; replacement of any sod, sidewalk, pavement damaged during construction; site restoration; and other appurtenant and miscellaneous items for a complete, satisfactory and functional installation; and

WHEREAS, the City Commission authorizes the Interim City Manager to issue an RFP for the Rehabilitation of Lift Stations 9 and 16, within the City and further authorizes the spending of up to Three Thousand Dollars ($3,000.00) for advertising purposes, if deemed appropriate.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

SECTION 2. AUTHORIZATION

The City Commission of the City of Opa-Locka hereby approves the issuance of a Request for Proposals (RFP), attached hereto as Exhibit "A", for the Rehabilitation of Lift Stations 9 and 16, within the City and further authorizes the spending of up to Three Thousand Dollars ($3,000.00) for advertising purposes, if deemed appropriate.

SECTION 3. SCRIVENER'S ERRORS

Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Resolution may be authorized by the Interim City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. EFFECTIVE DATE

This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

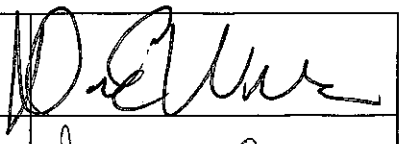
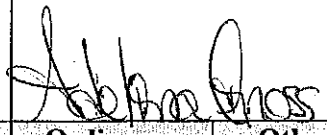
Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-locka
Agenda Cover Memo

Department Manager:	Adelina Gross			**Department Manager Signature:**		
City Manager:	**Darvin Williams**			**CM Signature:**		
Commission Meeting Date:		**Item Type:** *(Enter X in the box)*	**Resolution**	**X**	**Ordinance**	**Other**
Fiscal Impact: *(Enter X in the box)*	**Yes** / **X**	**No**	**Ordinance Reading:** *(Enter X in the box)*		**1st Reading**	**2nd Reading**
			Public Hearing: *(Enter X in the box)*		**Yes** / **X**	**No** / **X**
Funding Source: *Account#:* **See** Financial Impact	*(Enter Fund & Dept.)*		**Advertising Requirement:** *(Enter X in the box)*		**Yes**	**No** / **X**
Contract/P.O. Required: *(Enter X in the box)*	**Yes** / **X**	**No**	**RFP/RFQ/Bid#:**		*TBD*	
Strategic Plan Related *(Enter X in the box)*	**Yes** / **X**	**No**	**Strategic Plan Priority Area:** Enhance Organization ☐ Bus. & Economic Development ■ Public Safety ■ Quality of Education ☐ Qual. of Life & City Image ■ Communication ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*	
Sponsor Name:	**City Manager**		**Department: Capital Improvements Program**		*Department Submission Date:12/22/2023*	

Short Title:

Request for Proposals - Lift Stations 9 and 16 Rehabilitation Project
Project No. TBA

Staff Summary:

The City of Opa-locka (City) seeks proposals from qualified General Contractors for the Rehabilitation of Lift Stations 9 and 16.

The project consists of furnishing all materials, labor, and equipment necessary to Upgrade Sewage Pump Stations No. 9 and, 16, including, but not limited to, excavation, demolition, and modification

work including Abandon existing dry well; Remove dry well chimney; Remove existing pumps, valves, piping, fittings, emergency discharge connection, existing sewer clean out plug, existing concrete slabs; existing wet well top slab; Remove and Replace in kind to match existing 6'(feet) chain link fence; Remove and Relocate as required: existing water meter and connect the line to existing service; existing RTU antenna, existing electric box, existing concrete slab for electrical service; Relocate as required existing back flow preventer unit and water faucet, existing plug valve; furnish, installation, operation, and removal of temporary sewage effluent by-pass pumps, equipment and accessories; furnish and install wet well concrete top slab / new valve vault structure concrete and concrete top slab; furnish and install aluminum access hatches for wet well and valve vault and emergency connection; furnish and install new wet well protecting coating; furnish and install two (2) 2.68 HP submersible pumps and related equipment; furnish and install bubbler control system and related equipment; furnish and install new meter and main disconnect; furnish and install the proposed power/control system inclusive of the necessary electrical panel, enclosure, telemetry system, and related equipment; install electrical conduits and junction boxes; install R.T.U. panel and S.C.A.D.A. equipment furnished by the Department; electrical work; mechanical work: furnish all materials, equipment, and supplies necessary for pump stations startup and testing; furnish and install sewage force main pipe and fittings; connection to existing sewage force main; replacement of any sod, sidewalk, pavement damaged during construction; site restoration; and other appurtenant and miscellaneous items for a complete, satisfactory and functional installation.

Financial Impact The FY 24 Budget allocates $700,000 for the rehabilitation of Pump Station 9 and $800,000 for the rehabilitation of Pump Station 16, with all funding being ARPA grant funding. Since this is only a request to issue an RFP for this project, there is no commitment of these funds at this time. However, to ensure broad distribution of this RFP, staff may choose to publish it in publications in addition to electronic distribution, at a cost not to exceed $3,000. This will be funded from the Non-Department Other Advertising Account (19-514380) which currently has available funding of $13,059.

Proposed Action:

Staff recommends the issuance of a Request for Proposals for the Comprehensive Rehabilitation of Pump Stations 9 and 16 at an issuance cost not to exceed $3,000.

Attachment:

1. Agenda
2. RFP Set

CITY OF OPA-LOCKA

APPROVED BY
Miami-Dade County
Department of Regulatory and Economic Resources
Environmental Resources Management
Sewerage Facilities Only

2022 -SEW-EXT- 0428 Date: 6/8/2023

For the Director: _____

Note: This Approval is not intended to cover structural design

TEST REQUIRED
Permittee MUST notify RER-DERM before field test is performed for:

☑ Exfiltration ☒ Pressure ☒ Pump Station Start-Up

Note: Refer to Permit Conditions

LIFT STATION 16 REHABILITATION

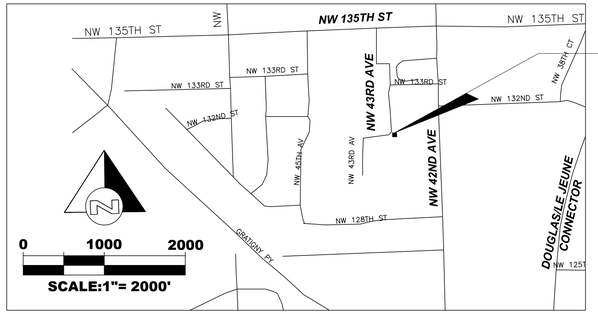
CITY COMMISSION

MAYOR: VERONICA WILLIAMS

VICE MAYOR: JOHN H TAYLOR

COMMISSIONER: DR. SHERELEAN BASS
CHRIS DAVIS
AUDREY DOMINGUEZ

INTERIM CITY MANAGER: DARVIN WILLIAM



PROJECT LOCATION

LOCATION MAP

INDEX OF SHEETS

SHEET NO	SHEET DESCRIPTION
C-100	COVER SHEET
C-200 TO C-201	GENERAL NOTES
C-300	SANITARY SEWER PLAN AND PROFILE
C-301	SANITARY SEWER DETAILS
C-310	MECHANICAL PLAN AND PUMP DATA
C-311	STRUCTURAL PLAN AND DETAILS
E-1	ELECTRICAL GENERAL NOTES
E-2	ELECTRICAL SITE PLAN
E-3	ELECTRICAL CONTROL PANEL
E-4	MISCELLANEOUS DETAILS

SSN ENGINEERING
13899 BISCAYNE BLVD., SUITE 310
NORTH MIAMI BEACH, FL 33181
PH (305) 440-4334
WWW.SSNENGINEERING.COM
CA# 29695

Rubel Siddique
Digitally signed by Rubel Siddique
Date: 2023.05.05 14:29:54 -04'00'

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RUBEL SIDDIQUE, PE. ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

NOTE:

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

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PREPARED BY: SSN ENGINEERING, LLC
ENGINEER OF RECORD: RUBEL SIDDIQUE, PE
FL PE NO.: 67239

SHEET NO.
C-100

STANDARD REQUIREMENTS FOR WATER AND SEWER CONSTRUCTION (GS 0.5-SHEET 1 OF 2)

1. ALL MATERIALS AND CONOSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI–DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.

2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 3'–0" MIN. UNDER RIGID PAVEMENT.

3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 53 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.

4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AT THE POINT OF ENTRY.

5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.

6. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY THE MIAMI–DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.

7. CONTRACTOR MUST CALL M–DWASD INSPECTION DIVISION TO ARRANGE FOR A PRE–CONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.

8. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT.
   a. EASEMENTS, IF REQUIRED.
   b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN.
   c. ABSOLUTE BILL OF SALE.
   d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT). ii. DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT).
   e. "AS–BUILT" PRINTS 24"x36" SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF All WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED FLORIDA SURVEYOR, ALONG WITH PRINTS OF "AS–BUILT WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR. (No. OF PRINTS: 3–FOR WATER, 4–FOR GRAVITY SEWER AND 5–FOR FORCE MAIN OR PUMP STATION PROJECTS). THE DEPARTMENT RESERVES THE RIGHT TO REQUIRE SUBMITTAL ON ELECTRONIC MEDIA IN ACCORDANCE WITH SEC. 01775 "MAGNETIC MEDIA SUBMITTAL".
   f. H.R.S. LETTER OF RELEASE REQUIRED FOR All WATER PROJECTS.
   g. Bill OF SALE SKETCH (8 1/2"x11") FOR WATER AND SEWER, SEPARATELY.

11. All NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.

12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR All NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.

13. UNLESS OTHERWISE SPECIFIED, All TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS Will BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES Will THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.

"AS-BUILT" REQUIREMENTS FOR WATER AND SEWER CONSTRUCTION (GS 0.5- SHEET 2 OF 2)

1. AT THE COMPLETION OF ANY WATER AND SEWER JOB, EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT:

a. AS–BUILT PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER. (QTY. OF PRINTS, AS REQUIRED BY THE DEPARTMENT.)

2. "AS–BUILT" FORMAT:

a. 24"x36" PRINTS
b. LOCATION MAP SCALE SHOULD BE 1"=300' AND SECTION –TOWNSHIP–RANGE SHOULD BE SHOWN.
c. THE WORD "AS–BUILT" IN LARGE LETTERS.
d. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION.
e. PREFERRED SCALE TO BE I"= 40' HORIZONTALLY AND I"= 4' VERTICALLY*.
f. STREET NOMENCLATURE.
g. SEPARATE AS–BUILTS FOR WATER AND SEWER.
h. SEPARATE WATER AND SEWER PROFILE.
i. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E., CL,SL , ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN.
j. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT.
k. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC).
l. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY "AS–BUILT" INFORMATION REFLECTED IN DRAWINGS.

3. WATER "AS–BUILTS" MUST INCLUDE:

a. PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES, HYDRANTS AND FITTINGS AT THE MAINLINE (IF PERPENDICULAR TO IT), AND AT MAIN AND END OF SERVICES IF ANY, OTHER ANGLE, AND DEFLECTION OF PIPE, IF ANY.
b. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.

4. SEWER "AS–BUILTS" MUST INCLUDE:

a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, IF ANY (FORCE MAIN ONLY), AND LOCATION OF LATERALS WITH REFERENCE TO MANHOLE.
b. PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH , ETC), AND STATION STARTING AT EACH 0+00 AT DOWNSTREAM MANHOLE.

5. FORCE MAIN "AS–BUILT" SAME AS WATER MAIN ABOVE.
6. EACH AS–BUILT SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT. OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPA OF DRAWINGS.

RER-DERM WATER-SEWER GENERAL NOTES

1. A horizontal distance of at least 6 feet, and preferably 10 feet (outside to outside), shall be maintained between gravity or pressure sewer pipes and water pipes. The minimum horizontal separation can be reduced to 3 feet for vacuum-type sewers or for gravity sewers where the top of the sewer pipe is at least 6 inches below the bottom of the water pipe. When the above specified horizontal distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.
   c) The top of the sewer is at least 18 inches below the bottom of the water pipe.

2. A vertical distance of at least 12 inches (outside to outside) shall be maintained between any water and sewer mains with sewer pipes preferably crossing under water mains. The minimum vertical separation can be reduced to 6 inches for vacuum-type sewers or for gravity sewers where the sewer pipe is below the water main. The crossing shall be arranged so that all water main joints are at least 6 feet from all joints in gravity and pressure sewer pipes. This distance can be reduced to 3 feet for vacuum-type sewers. When the above specified vertical distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.

3. Air release valves shall be provided at high points of new force main sanitary sewers.

4. Gravity sanitary sewers constructed within a public wellfield protection area shall be C-900 PVC or Ductile Iron Pipe. The maximum allowable exfiltration rate of gravity sanitary sewers constructed in a public wellfield protection area shall be:
   a) Residential Land Uses. Fifty (50) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   b) Non-Residential Land Uses. Twenty (20) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.

5. The maximum allowable exfiltration rate of gravity sanitary sewers constructed outside a public wellfield protection area shall be one hundred (100) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe. Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.

6. Forcemain sanitary sewers constructed within a public wellfield protection area shall be ductile iron, C-900 PVC, HDPE or reinforced concrete pressure sewer pipes.

7. The maximum allowable exfiltration/leakage rate of forcemain sanitary sewers shall be:
   a) Ductile Iron, C-900 PVC, HDPE and PVC Pipe. The allowable leakage rate specified in American Water Works Association Standard (AWWAS) C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   b) Reinforced Concrete Pressure Pipe. Half (1/2) the allowable leakage rate specified in AWWA C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.

8. The contractor shall verify nature, depth, and character of existing underground utilities prior to start of construction.

9. In no case shall a contractor install utility pipes, conduits, cables, etc. in the same trench above an existing water or sewer pipe except where they cross.

10. If any area of the work site is found to contain buried solid waste and/or ground or ground water contamination, the following shall apply:
    a) All work in the area shall follow all applicable safety requirements (e.g., OSHA, etc.) and notification must be provided to the appropriate agencies.
    b) Immediately notify the Environmental Monitoring and Restoration Division (EMRD). The EMRD can be contacted at (305) 372-6700.
    c) If contaminated soils and/or buried solid waste material is excavated during construction, then they require proper handling and disposal in accordance with the local, state and federal regulations. Be advised that the landfill owner/operator is the final authority on disposal and may have requirements beyond those provided by herein. If disposal within a Miami-Dade County owned landfill (Class I landfill) is appropriate and selected, please contact the Miami-Dade County Department of Solid Waste Management at (305) 594-6666 for information.
    d) The reuse of contaminated soils that are not returned to the original excavation requires prior approval of a Soil Management Plan from the Environmental Monitoring and Restoration Division. The EMRD can be contacted at (305) 372-6700.

11. Pumps must comply with the National Electrical Code (NEC) requirements for Class I, Group D, Division 1 locations (Explosion Proof).

12. The contractor is advised that a Tree Removal/Relocation Permit may be required prior to the removal and/or relocation of tree resources. Prior to removing or relocating any trees, the Contractor shall notify the Tree and Forest Resources Section of DERM at (305) 372-6574 or via e-mail at: tfrs@miamidade.gov , or contact the municipality with tree ordinance jurisdiction to obtain any required permits. Those trees not interfering with the construction shall be protected in place in accordance with the provisions of Section 24-49.5 of the Miami-Dade Code.

13. Please note that the demolition, removal, and/or disturbance of existing underground utilities that contain asbestos- cement pipes (ACP) are subject to the provisions of 40 CFR-61 Subpart M. Therefore, pursuant to the provisions of 40 CFR-61-145, a NOTICE OF DEMOLITION OR ASBESTOS RENOVATION form must be filed with the Air Quality Management Division (AQMD) of DERM, at least ten (10) working days prior to starting of any work. Note that the backfilling and burial of crushed ACP would cause these locations to be considered active disposal sites and subject to 40 CFR-61.154, and 40 CFR-61.151 a year after project completion.
    Existing standard operating procedures, as well as applicable federal, state and local regulatory criteria, must be followed and implemented to minimize any potential release of fugitive emissions, especially during project construction activities. The AQMD can be contacted via email at asbestos@miamidade.gov or 305-372-6925.

Rev. 4/30/2018

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FOR ALL PROJECT WHERE REMOVAL OF UTILITY LINES IS PROPOSED

1– ALL EXISTING UTILITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN IN EFFECT AND IN SERVICE, UNTIL SUCH TIME WHEN PROPOSED REPLACING UTILITIES HAVE BEEN INSTALLED AND IN SERVICE AND ALL RELATED SERVICES TO THE FIRST LINES HAVE BEEN TRANSFERRED TO THE LATTER ONES, BY M–DWASD FORCES AT OWNERS EXPENSES.

2– ALL ABANDONED OR REPLACED UTILITY LINES LOCATED IN PRIVATE PROPERTY SHALL BE REMOVED AND CAPPED AT MAIN, WHEN APPLICABLE, AFTER ALL INSTALLED SERVICES TO OR FROM THEM HAVE BEEN TRANSFERRED TO THE ALREADY INSTALLED AND IN SERVICE PROPOSED UTILITY LINES, ANY RELATED EASEMENT SHALL BE RELEASED AND VACATED AFTER REMOVAL OF LINES AND RESTORATIONS OF SITE, IF APPLICABLE, HAVE BEEN COMPLETED.

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RUBEL SIDDIQUE, PE. ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

NO.	REVISIONS	DATE	BY

SSN ENGINEERING, LLC
13899 BISCAYNE BLVD., STE 310
NORTH MIAMI BEACH, FL 33181
PH (954) 944-3272
FBPE NO. CA00029695
WWW.SSNENGINEERING.COM

SSN ENGINEERING

PROJECT NO.
202201004

CITY OF OPA-LOCKA
LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

GENERAL NOTES

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

Rubel Siddique — Digitally signed by Rubel Siddique Date: 2023.05.05 14:30:22 -04'00'

DRAWN BY: RS
CHECKED BY: RS
DATE: 09-05-2022
SHEET NO.
C-200

1. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF OPA-LOCKA AND/OR MIAMI-DADE COUNTY WATER & SEWER DEPARTMENT (MD-WASD) AND/OR MIAMI DADE COUNTY PUBLIC WORKS DEPARTMENT (MD-PWD) AND/ OR THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT.

2. MINIMUM COVER OVER MAINS SHALL BE 3'-0". 2'-0" FOR SERVICE LINES, UNLESS SPECIFIC WRITTEN EXCEPTION IS ISSUED OR REQUIRED BY AN AUTHORIZED REPRESENTATIVE OF CITY OF OPA-LOCKA.

3. DETECTOR TAPE SHALL BE INSTALLED 18" ABOVE THE CENTERLINE OF MAINS AND SERVICES. TAPES SHALL BE GREEN CONTINUOUSLY MARKED "CAUTION WASTEWATER FORCE MAIN BURIED BELOW".

4. ALL VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND No. 53 C.I. VALVE BOXES AND LIDS.

5. LOW PRESSURE SEWER MAIN SHALL BE HDPE SDR-11. SERVICE LINES SHALL BE HDPE SDR-9.

6. ALL JOINTS FOR LOW PRESSURE HDPE MAIN SHALL BE BUTT-FUSION WELDED. ALL WELDING OF JOINTS SHALL BE IN STRICT CONFORMITY WITH THE RECOMMENDATIONS OF THE PIPE MANUFACTURER UNLESS OTHERWISE SPECIFIED IN WRITING.

7. CONTRACTOR MUST CALL THE CITY OF OPA-LOCKA INSPECTION DIVISION AND ALL OTHER APPLICABLE PERMITTING AGENCIES TO ARRANGE FOR A PRE-CONSTRUCTION MEETING AT LEAST 72 HOURS PRIOR TO PROPOSED START OF CONSTRUCTION.

8. CITY OF OPA-LOCKA PERSONNEL WILL INSPECT ALL FACILITIES APPROVED BY THE ENGINEERING DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.

9. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY CITY OF OPA-LOCKA:

*EASEMENTS, IF REQUIRED (WHETHER BY DEED OR PLAT SUITABLY RECORDED)
* CONTRACTOR'S WAIVER AND RELEASE OF LIEN
* CONTRACTOR'S LETTER OF WARRANTY (I.E. LETTER AGREEMENT)
* AS-BUILT 24" x 36" SHOWING SPECIFIC LOCATIONS, DEPTHS, ETC. OF ALL WATER FACILITIES AS LOCATED BY A LICENSED SURVEYOR, ALONG WITH TWO (2) PRINTS OF THE "AS-BUILT" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR OR ENGINEER OF RECORD AND ENDORSED BY THE CONTRACTOR IN ACCORDANCE WITH MD-WSD STANDARDS.

10. ALL NEW CONNECTIONS FROM EXISTING CITY OF OPA-LOCKA MAINS TO BE INSPECTED BY CITY OF OPA-LOCKA FORCES PRIOR TO BACKFILL.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL LOCATIONS, DIMENSIONS, ELEVATIONS AND THE LOCATIONS OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE LOCATIONS SHOWN ON THE PLANS ARE NOT GUARANTEED ACCURATE OR CORRECT BY THE KNOWN UTILITY COMPANIES.

12. THRUST BLOCKS SHALL BE PROVIDED TO ALL BENDS, TEES AND PLUGS IN ACCORDANCE WITH MD-WASD STANDARD DETAILS.

13. PIPE INSTALLATION, CLEANING, FLUSHING, AND TESTING, AS PER CITY OF OPA-LOCKA AND STATE OF FLORIDA STANDARDS FOR THE INSTALLATION OF PRESSURE SEWER BY CUSTOMER DONATION PROJECTS.

14. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF INSPECTIONS FOR ANY CONSTRUCTION ACTIVITIES OCCURRING OUTSIDE NORMAL WORKING HOURS (8:00 a.m. TO 5:00 p.m.) SATURDAYS AND SUNDAYS AND HOLIDAYS EXCLUDED AND ARRANGEMENTS FOR INSPECTIONS OUTSIDE NORMAL WORKING HOURS MUST BE MADE A MINIMUM OF 48 HOURS IN ADVANCE OF THE CONSTRUCTION ACTIVITY.

15. ALL TRENCHES TO BE EXCAVATED AND BACKFILLED AS PER THE MD-WASD DETAIL GS-1.9.

16. SURFACE RESTORATION, PAVEMENT REPLACEMENT, SIDEWALK REPLACEMENT, TRENCH BACKFILLING AND COMPACTION SHALL COMPLY WITH THE APPLICABLE CURRENT MD-WASD, MD-PWD AND FDOT STANDARDS.

17. THE ENGINEER OF RECORD SHALL PROVIDE CITY OF OPA-LOCKA WITH A SIGNED AND SEALED PRESSURE TEST REPORT CERTIFYING PRESSURE TEST RESULTS.

18. FIELD LEAK TESTING OF POLYETHYLENE (PE) PRESSURE PIPING SYSTEMS USING HYDROSTATIC PRESSURE SHALL BE CONDUCTED BY THE CONTRACTOR FOLLOWING METHODS AND PROCEDURES NOTED ASTM DESIGNATION: F2164-13

19. A HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. WHEN A 10 FEET HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, THIS HORIZONTAL DISTANCE MAY BE REDUCED TO 6 FEET. IF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF A GRAVITY SANITARY SEWER, THIS HORIZONTAL DISTANCE MAY BE REDUCED TO 3 FEET.

20. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING AND THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO A COMPLETE EVALUATION OF EXISTING AND PROPOSED CONDITIONS.

21. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.

22.TRENCH EXCAVATION PROTECTION SHALL BE ACCOMPLISHED AS REQUIRED BY THE PROVISIONS OF PART 1926, SUBPART P, EXCAVATIONS, TRENCHING AND SHORING OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS STANDARDS AND INTERPRETATIONS.

23. ALL ABOVE GROUND PIPE & FITTING, VALVE BOXES, AIR RELEASE VALVE COVERS AND ANY OTHER MARKING DEVICE, SHALL BE COLOR CODED IN ACCORDANCE WITH THE UTILITY LOCATION & COORDINATION COUNCIL UNIFORM COLOR CODE AS SHOWN IN MIAMI-DADE COUNTY WATER & SEWER DEPARTMENT (MD-WASD).

NOTES FOR CONTAMINATED SITES

IF ANY AREA OF THE WORK SITE IS FOUND TO CONTAIN BURIED SOLID WASTE AND/OR GROUND OR GROUND WATER CONTAMINATION, THE FOLLOWING SHALL APPLY:

1. ALL WORK IN THE AREA SHALL FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS (E.G., OSHA, ETC.) AND NOTIFICATION MUST BE PROVIDED TO THE APPROPRIATE AGENCIES.

2. IMMEDIATELY NOTIFY THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION (EMRD). THE EMRD CAN BE CONTACTE AT (305) 372-6700.

3. IF CONTAMINATED SOILS AND/OR BURIED SOLID WASTE MATERIAL IS EXCAVATED DURING CONSTRUCTION, THEN THEY REQUIRE PROPER HANDLING AND DISPOSAL IN ACCORDANCE WITH THE LOCAL, STATE AND FEDERAL REGULATIONS. BE ADVISED THAT THE LANDFILL OWNER/OPERATOR IS THE FINAL AUTHORITY ON DISPOSAL AND MAY HAVE REQUIREMENTS BEYOND THOSE PROVIDED BY HEREIN. IF DISPOSAL WITHIN A MIAMI-DADE COUNTY OWNED LANDFILL (CLASS I LANDFILL) IS APPROPRIATE AND SELECTED, PLEASE CONTACT THE MIAMI-DADE COUNTY DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT AT (305) 594-1670 FOR INFORMATION.

4. THE REUSE OF CONTAMINATED SOILS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION. THE EMRD CAN BE CONTACTED AT (305) 372-6700.

5. A SUBSURFACE INVESTIGATION WAS CONDUCTED BY ENVIRONMENTAL REGULATORY COMPLIANCE, INC. (ERC) DATE MARCH 2022. THE REPORT STATED THAT THE PRESENCE OF SOLID WASTE MIXED WITH OTHER MATERIAL (CARBONATE AND SILICA SAND, LIMEROCK, AND ORGANIC MATERIAL) WILL NOT SUBSIDE BY THE INSTALLATION OF THE 2 INCH SEWER LINE.

DESIGN APPROACH

1. A SUBSURFACE INVESTIGATION WAS CONDUCTED BY ENVIRONMENTAL REGULATORY COMPLIANCE, INC. (ERC) DATE MARCH 2022. THE REPORT STATED THAT THE PRESENCE OF SOLID WASTE MIXED WITH OTHER MATERIAL (CARBONATE AND SILICA SAND, LIMEROCK, AND ORGANIC MATERIAL) WILL NOT SUBSIDE BY THE INSTALLATION OF THE 2 INCH SEWER LINE.

2. DUE THE UNDERLYING SOIL CONDITION OF THE SITE, HDPE PIPE WAS USED TO ADDRESS ANY CONTAMINATION ISSUES. ACCORDING TO THE PIPE MANUFACTURER, POLYETHYLENE IS NON-CONDUCTIVE AND IMMUNE TO GALVANIC AND ELECTROCHEMICAL EFFECTS. THUS POLYETHYLENE WILL NOT CORRODE IN THE MANNER OF METAL AND CONCRETE PIPING. PERFORMANCE POLYETHYLENE PIPES HAVE OUTSTANDING RESISTANCE TO A WIDE RANGE OF CHEMICALS AND ENVIRONMENTAL CONDITIONS, MAKING THEM IDEAL CANDIDATES FOR USE WITH CORROSIVE FLUIDS AND CHEMICALS, AND UNDER HARSH ENVIRONMENTAL CONDITIONS.

3. ALL THE JOINT IN THE HDPE PIPES WILL BE FUSED JOINT, THERFORE NO POSSIBILITY OF JOINT LEAKING.

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

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PROJECT NO.
202201004

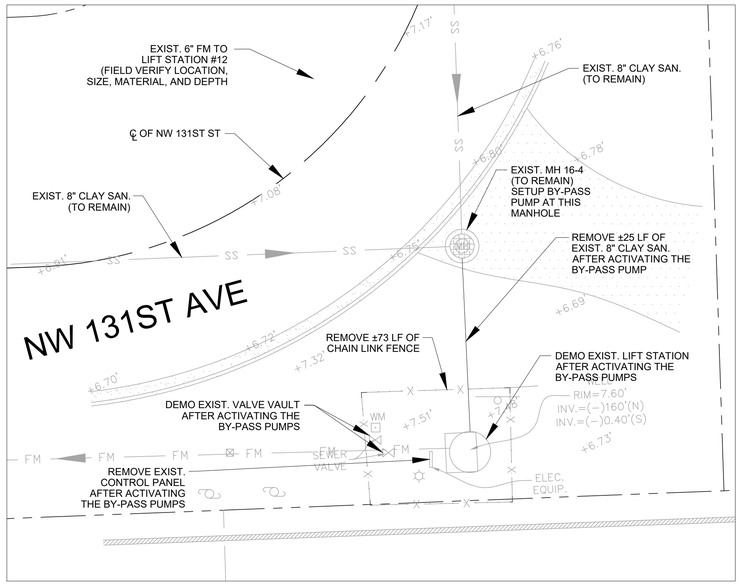
CITY OF OPA-LOCKA
LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

GENERAL NOTES

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

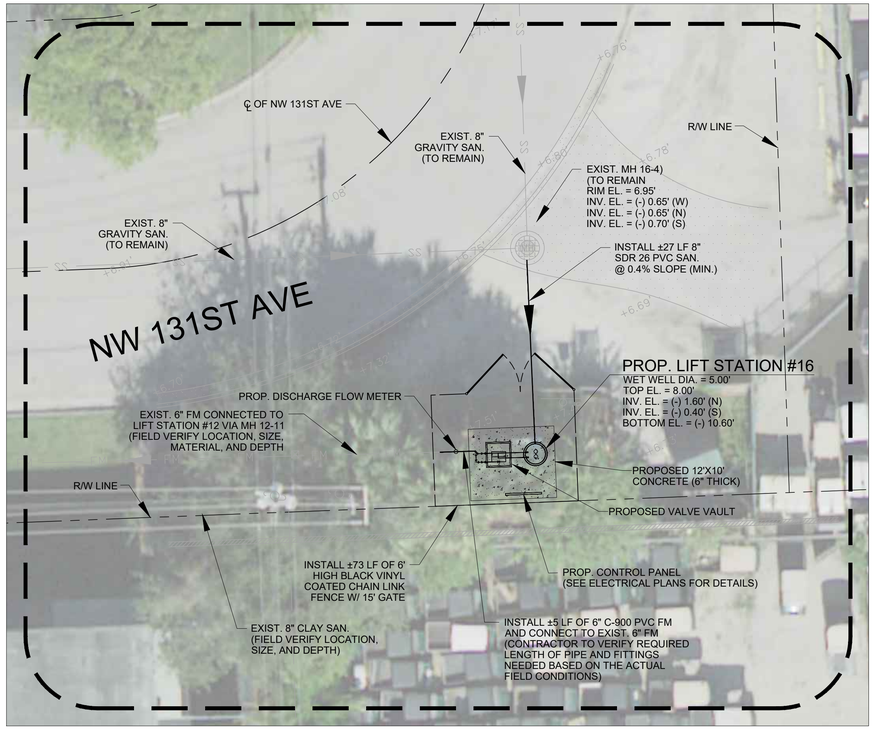
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CHECKED BY: RS
DATE: 09-05-2022
SHEET NO.
C-201



SITE DEMOLITION PLAN

1" = 10'

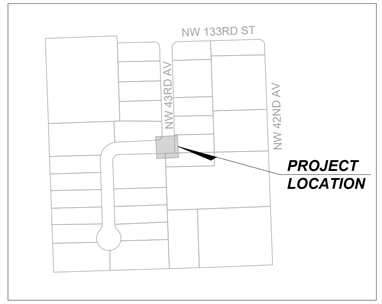


ENLARGED VIEW

1" = 10'

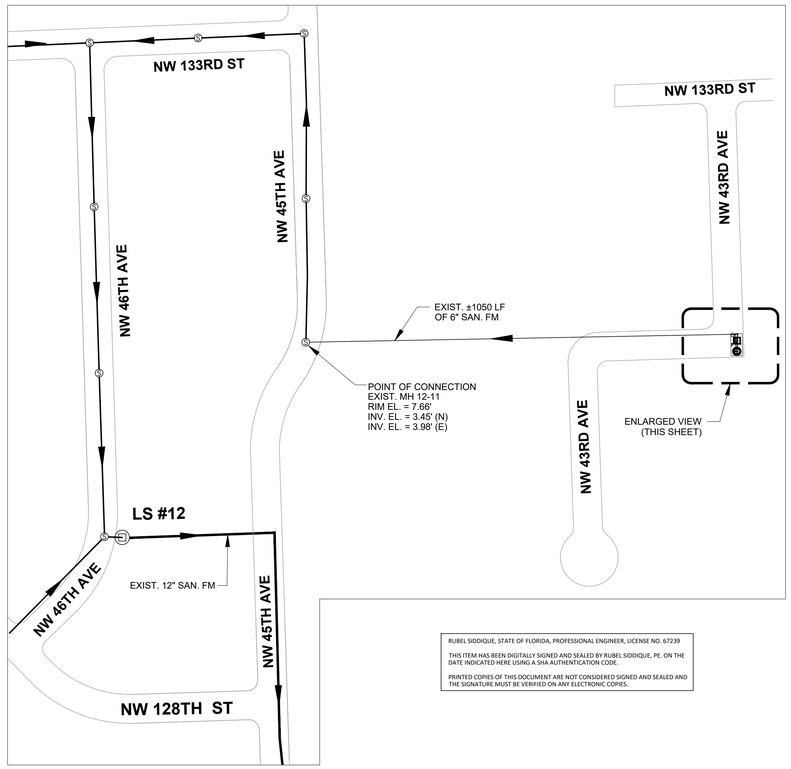


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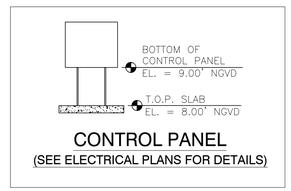
LOCATION MAP

N.T.S.



OVERALL VIEW OF POINT OF CONNECTION

N.T.S.



CONTROL PANEL

(SEE ELECTRICAL PLANS FOR DETAILS)

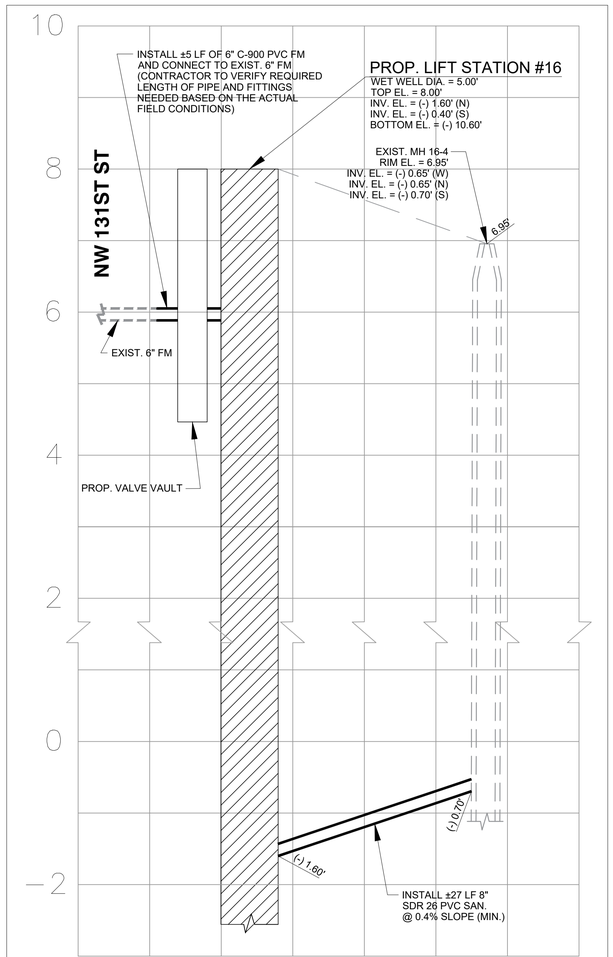
LEGEND

- R/W LINE OR PROPERTY LINE
- BUILDING OUTLINE
- SD — EXISTING STORM PIPE
- WM — EXISTING WATER PIPE
- SS — EXISTING SAN. SEWER PIPE
- EXISTING SAN. SEWER MANHOLE
- 7.31 — EXISTING GRADE ELEVATION
- PROPOSED FORCE MAIN
- EXISTING FIRE HYDRANT

NOTE:
ALL ELEVATIONS REFER TO NGVD 1929.
NAVD88 = NGVD29 - 1.55

GENERAL NOTES:

1. CONTRACTOR SHALL MAINTAIN FUNCTION OF SEWAGE PUMPING DURING CONSTRUCTION BY UTILIZING BY-PASS PUMPING SYSTEM, FITTINGS AND VALVES AS REQUIRED. CONTRACTOR SHALL SUBMIT A PLAN OUTLINING SEWAGE "BY-PASS" PROCEDURE TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.
2. THE EXISTING UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE CITY OF OPA-LOCKA WATER AND SEWER ATLAS, SURVEY AND SITE VISIT. CONTRACTOR MUST VERIFY SIZE, LOCATION, AND INVERTS OF ALL UTILITIES PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL PERFORM ALL WORK WITHIN LEGAL PROPERTY AND EASEMENT, AND SHALL NOT DISTURB ADJACENT PROPERTY.
4. CONTRACTOR SHALL VERIFY EXISTING PIPING TO REMAIN BEFORE ORDERING PROPOSED PIPING/FITTINGS CONNECTING TO IT.
5. CARE SHOULD BE TAKEN TO AVOID DISTURBING ELECTRICAL SERVICE IN THE AREA UNDER CONSTRUCTION.
6. CONTRACTOR SHALL INCLUDE NECESSARY CUTTING, PATCHING, AND RESTORATION OF ALL EXISTING SURFACES TO MATCH SURROUNDING AREAS.
7. CONTRACTOR TO COAT ALL UNDERGROUND FITTINGS THOSE ARE IN DIRECT CONTACT WITH SOIL WITH TWO COATS OF BITUMASTIC OR APPROVED EQUAL.
8. ELEVATIONS INDICATED HEREON ARE IN FEET AND DECIMALS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).
9. THE MINIMUM WET-WELL BOTTOM SLOPE SHALL BE 2:1 TO ALLOW SELF-CLEANING AND MINIMUM DEPOSIT OF DEBRIS.
10. THE ELECTRICAL SYSTEMS AND COMPONENTS IN RAW WASTEWATER WET WELLS SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE REQUIREMENTS FOR CLASS I, GROUP D, DIVISION 1.
11. THE STATION SHOULD BE EQUIPPED WITH MISSION M850 RTUs FOR REAL-TIME ALARMS AND STREAMING DATA OR APPROVED EQUAL. MONITOR/RECORD OPERATING HOURS BETWEEN MIDNIGHT AND FIVE (5) AM.
12. FLOW METER SHALL BE ABB ELECTROMAGNETIC FLOW METER DN150 (6") OR APPROVED EQUAL.
13. THE STATION WILL EQUIPPED WITH DEVICES TO MONITOR DISCHARGE PRESSURE (E.G. PRESSURE TANSDUCER) WITH HIGH AND LOW PRESSURE ALARM SET POINTS.



SEWER FORCE MAIN PROFILE

SCALE: 1" = 10' HOR.
1" = 2' VER.

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CITY OF OPA-LOCKA
LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

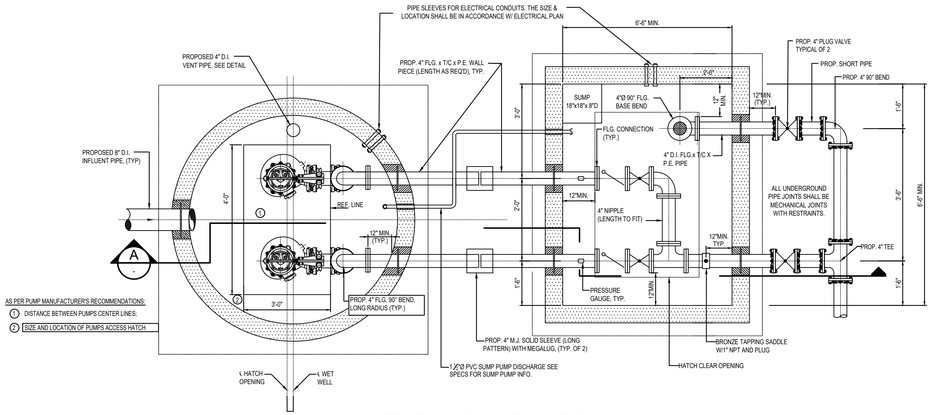
SANITARY SEWER PLAN AND PROFILE

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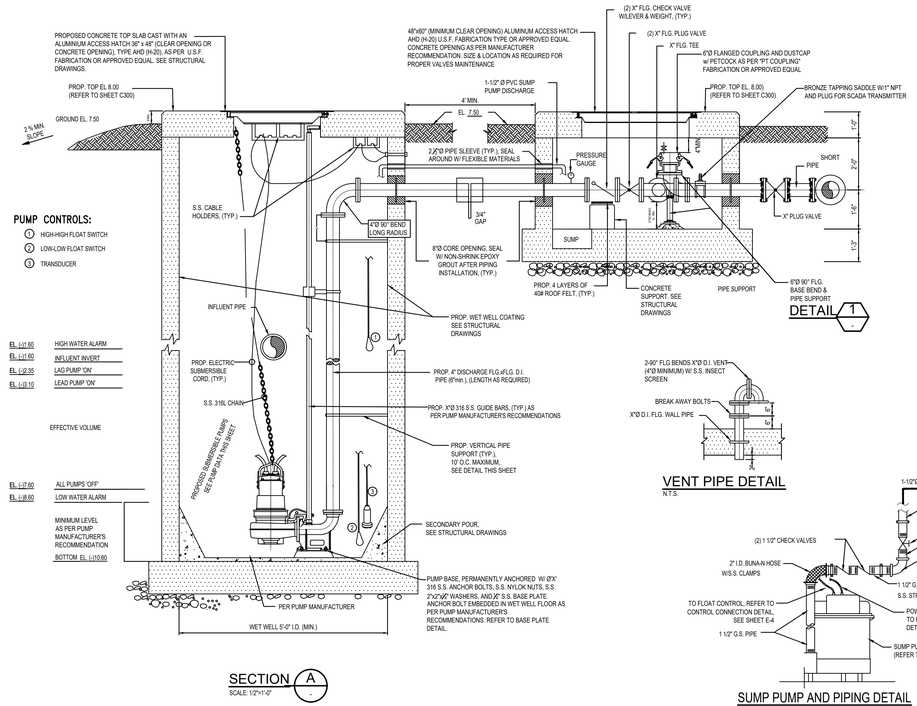
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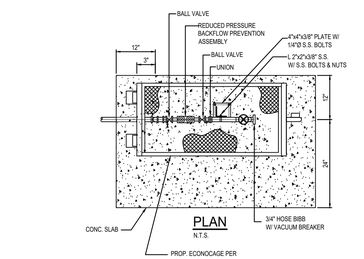
WET WELL AND VALVE VAULT PLAN

SCALE: 1/2"=1'-0"



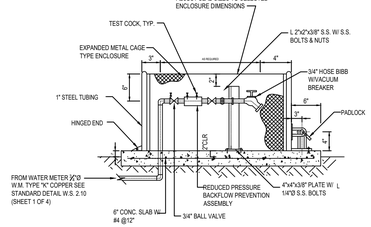
SECTION A

SCALE: 1/2"=1'-0"



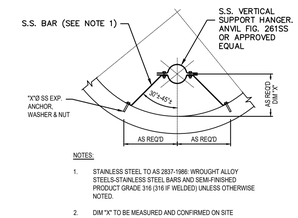
PLAN

N.T.S.



BACKFLOW PREVENTER WITH HOSE BIBB

N.T.S.



VERTICAL PIPE SUPPORT DETAIL

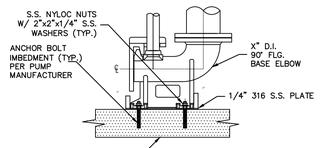
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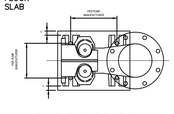
VENT PIPE DETAIL

N.T.S.

SUMP PUMP AND PIPING DETAIL

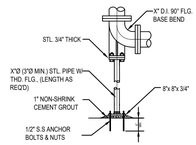
N.T.S.





BASE PLATE DETAIL

N.T.S.



GALVANIZED PIPE SUPPORT DETAIL 1

N.T.S.

PUMP DATA:

FLUID		RAW SEWAGE
INSTALLATION LOCATION		LIFT STATION No. 16
PUMP TYPE		SUBMERSIBLE PUMP
RATED POINT	CAPACITY, GPM	265
	TDH, FEET	36
SHUT OFF HEAD, FT		
CONTINUOUS OPERATING RANGE	MAXIMUM TDH, FT	44
	CAPACITY, GPM	80
	MINIMUM TDH, FT	25
	CAPACITY, GPM	510
	NPSHR, FT	5.05
	PUMP EFFICIENCY — AT B.E.P., %	51.3
	PUMP EFFICIENCY — MIN. @ RUNOUT, %	20
PUMP CONSTRUCTION	CASING	CAST IRON ASTM A 48 CLASS 35B
	IMPELLER	CAST IRON ASTM A 48 CLASS 35B
	SHAFT	AISI TYPE 431 STAINLESS STEEL
	BEARINGS L-10 LIFE, HRS.	100,000
	MAX. SHAFT DEFLECTION IN OPERATING RANGE, MILS	–
	MAX. VEL. OF VIBRATIONS IN OP. RANGE, INCH/SEC	–
	SUCTION, INCHES	4"
	DISCHARGE, INCHES	4"
ELECTRIC MOTOR	RATED HP	4.60 HP
	RPM	1744
	VOLTS/PHASE/Hz/S.F.	230/ /60/
	AMBIENT TEMP. FOR MOTOR RATING, °C	68
	MAXIMUM TEMP. RISE, °C	40
	BEARINGS L-10 LIFE, HRS.	100,000
	MAX. VIBRATION AMP., MILS	-
	NOISE LEVEL, dB@1 METER	-
	NEMA DESIGN CODE LETTER	B
	START. CURR. LETTER CODE	G
	INSULATION CLASS	F
	MOTOR RATED HP NOT OVERLOADED AT ANY POINT IN THE PUMPS PERFORMANCE CURVE	
MANUFACTURERS & MODELS *	PUMP	XFP100C CB1 60HZ BY XYLEM
	MOTOR	PE35/4-C-60HZ

* CONTRACTOR MAY CHOOSE APPROVED EQUAL PUMPS AND SUBMIT SHOP DRAWINGS TO THE EOR FOR APPROVAL PRIOR TO INSTALLATION

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

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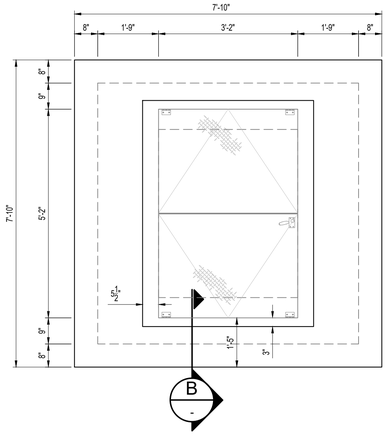
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OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

MECH-PLAN-PUMP-DATA

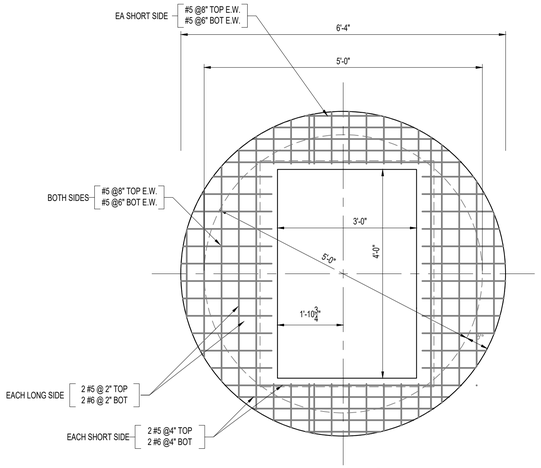
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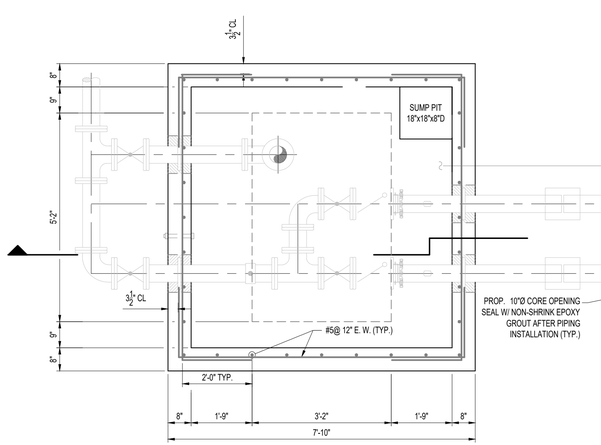


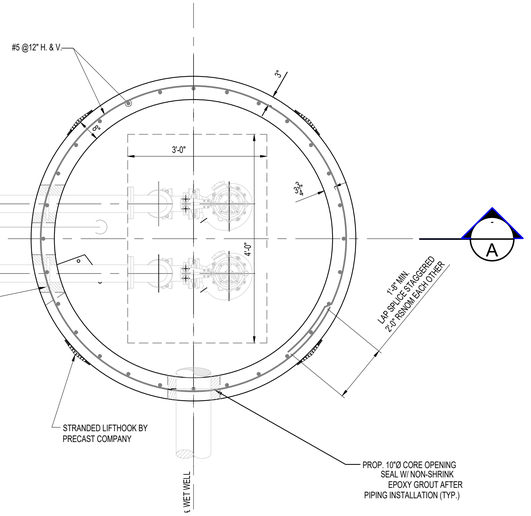
PLAN/VALVE PIT ACCESS



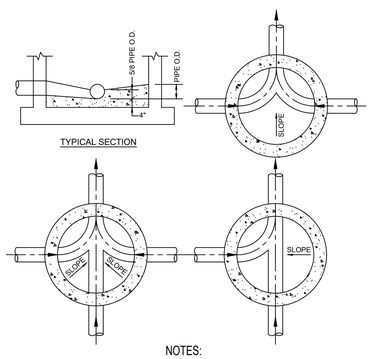
WET WELL TOP SLAB DETAIL

SCALE: 1/2"=1'-0"





SCALE: 1/2"=1'-0"



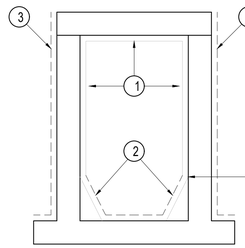
NOTES:

INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT
INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
CHANNELS TO BE FORMED IN ALL MANHOLES TO ACCEPT T.V. CAMERA.
WHEN DIRECTIONAL CHANNELS EXCEEDING 45° OCCUR, AN EXTRA FLOW
LINE ELEVATION DROP OF 0.05' ACROSS MANHOLE SHALL BE PROVIDED.

MANHOLE FLOW CHANNELS

DETAIL

N.T.S.

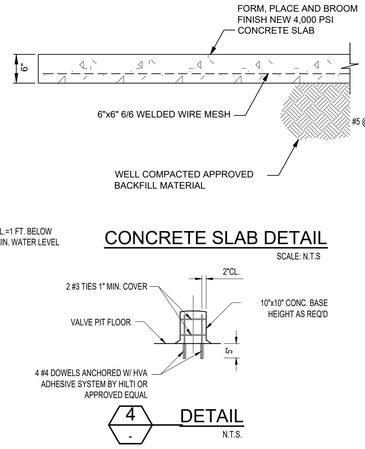


DETAIL

N.T.S.

1 SEWPERCOAT (CALCIUM ALUMINATE CEMENT) OR P.P.C. COATING SYSTEM WW-200-/a/ DAMP CONCRETE OR APPROVED EQUAL

2 AND 3 KOP-COAT BITUMASTIC 300-M (COAL-TAR EPOXY).

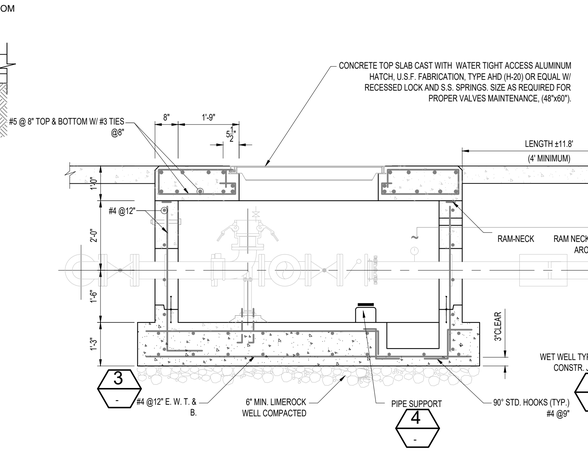


CONCRETE SLAB DETAIL

SCALE: N.T.S

DETAIL

N.T.S.

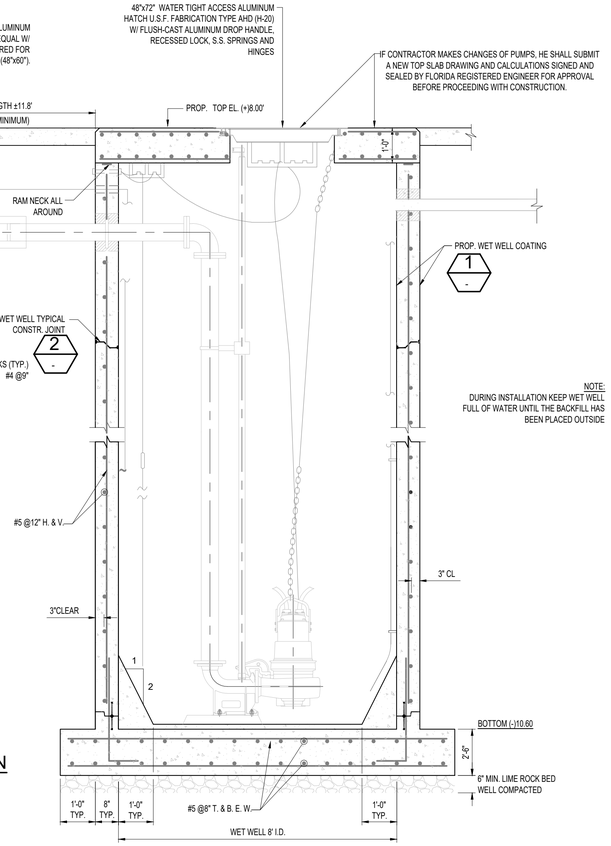


DETAIL

N.T.S.

DETAIL

N.T.S.



SECTION

SCALE: 1/2"=1'-0"

CONSTRUCTION NOTES:

1. THE STANDARD DRAWINGS PRESENTED ARE BASED ON MINIMUM OF 4" DISCHARGE FORCE MAIN.
2. CONTRACTOR SHALL VERIFY EXISTING UNDERGROUND UTILITIES IN APPLICATIONS, ELEVATIONS, AND QUALITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY EXISTING PIPING TO REMAIN BEFORE ORDERING NEW PIPE AND FITTINGS FOR CONNECTIONS. tHE CONTRACTOR SHALL INSPECT AND VERIFY ALL SITE CONDITIONS AND DIMENSIONS, AND COORDINATE WITH OTHER TRADES PRIOR TO CONSTRUCTION. WORK SHALL BE SCHEDULED ACCORDING TO SPECIFIED CONSTRUCTION SEQUENCE.
3. ATTENTION TO AVOID DISTURBING EXISTING ELECTRICAL SERVICE IN THE AREA UNDER CONSTRUCTION (FOR EXISTING FACILITIES ONLY).
4. ALL ELEVATIONS FOR UNDERGROUND UTILITIES SHOWN ARE T.O.P. ELEVATIONS UNLESS OTHERWISE SPECIFIED.
5. ALL PIPING, UNLESS SPECIFIED, TO USE DUCTILE IRON WITH LINING OF SEWER APPLICATION. FITTINGS AND CONNECTIONS UNDERGROUND TO USE MECHANICAL JOINT WITH RESTRAINTS; FITTINGS ABOVE GROUND OR IN VAULT TO USE FLANGE JOINT, OR MECHANICAL JOINT WITH RESTRAINTS
6. APPLY ALL UNDERGROUND FITTING WITH BOLT CONNECTIONS IN DIRECT CONTACT WITH SOIL WITH TWO COATS OF BITUMASTIC OR APPROVED EQUAL.
7. PROVIDE DIELECTRIC FITTINGS BETWEEN TWO DIFFERENT PIPING MATERIALS.
8. PIPE SUPPORTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
9. PROPOSED WET WELL SHALL BE CYLINDRICAL TYPE MADE OF REINFORCED CONCRETE WITH DEPTH NO GREATER THAN 24 FEET.
10. ALL PUMP CONTROLS SHALL BE SET AS PER DESIGN REQUIREMENTS.
11. ALL PIPING FOR OUTSIDE DROP TO BE DUCTILE IRON WITH LINING OF SEWER APPLICATION. FITTINGS AND CONNECTIONS UNDERGROUND TO USE MECHANICAL JOINT WITH RESTRAINTS.
12. PUMP STARTUP SHALL BE PERFORMED WITH NO EFFLUENT DISCHARGING INTO THE WET-WELL. PUMPS OPERATING POINTS CALCULATED BY PUMP REPRESENTATIVE DURING THE DRAWDOWN TEST SHALL BE NO GREATER THAN 10% OFF THE PUMP CURVE. PROPOSED PUMPS SHALL HANDLE BOTH MAX, MIN AND AVERAGE OPERATING POINTS GIVEN BY THE ENGINEER OF RECORD.
13. THREE PRESSURE GAUGES ARE TO BE INSTALLED INSIDE THE VALVE BOX, ONE GAUGE BEFORE EACH CHECK VALVE AND ONE PRESSURE GAUGE ON THE FORCEMAIN SIDE. PRESSURE DIAL READER SHALL NOT EXCEED 20 PSI.

NO.	REVISIONS	DATE	BY

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SSN ENGINEERING

PROJECT NO.

202201004

CITY OF OPA-LOCKA
LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

STRUCTURAL PLANS
AND DETAILS

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

Rubel Siddique
Digitally signed by Rubel Siddique
Date: 2023.05.05 14:31:41 -04'00'

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DATE:	09-05-2022
SHEET NO.	C-311

ELECTRICAL GENERAL NOTES

I. GENERAL REQUIREMENTS

A. DRAWINGS. THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL OF THE MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL, AND SITE CONDITIONS SHALL GOVERN THE EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, CHECK DRAWINGS OF ALL TRADES TO VERIFY SPACES IN WHICH WORK WILL BE INSTALLED. WHERE HEADROOM OR SPACE CONDITIONS APPEAR INADEQUATE, CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE FIELD MODIFICATION IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF VARIOUS TRADES OR FOR PROPER EXECUTION OF THE WORK. SITE CONDITIONS SHALL GOVERN THE EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT, DEVICES, WIRING, CONDUIT, ETC.

ONE COMPLETE SET OF DRAWINGS AND SPECIFICATIONS SHALL BE KEPT ON FILE AT THE SITE FOR THE SOLE USE OF MARKING AS-BUILT DATA. ALL CHANGES SHALL BE MARKED IN RED ON THESE PRINTS AS WORK PROGRESSES.

PRIOR TO EACH REQUISITION FOR PAYMENT, AS-BUILT PRINTS SHALL BE BROUGHT UP TO DATE FOR ACCEPTANCE BY OWNER'S REPRESENTATIVE.

THE COMPLETED SET OF AS-BUILT PRINTS SHALL BE DELIVERED TO THE ARCHITECT/ENGINEER PRIOR TO FINAL PAYMENT FOR INCORPORATION ONTO ORIGINALS.

RISERS ARE DIAGRAMMATIC AND DON'T INTEND TO SHOW EVERY BEND REQUIRED FOR THE INSTALLATION.

B. COORDINATION. CONTRACTOR WILL BE REQUIRED TO FURNISH, INSTALL AND/OR CONNECT WITH APPROPRIATE SERVICES ALL ELECTRICAL ITEMS SHOWN ON ANY OF THE ARCHITECTURAL, PLUMBING, AIR CONDITIONING SPRINKLER, INTERIOR DESIGN AND ELECTRICAL DRAWINGS WITHOUT ADDITIONAL EXPENSE TO THE OWNER. IF DISCREPANCIES, CONFLICTS, INTERFERENCES OR OMISSIONS OCCUR BETWEEN DRAWINGS, NOTIFY IN WRITING THE ARCHITECT/ENGINEER IN AMPLE TIME TO PERMIT REVISIONS BEFORE THE BIDS ARE SUBMITTED.

ELECTRICAL CONTRACTOR SHALL COORDINATE THE REQUIREMENTS OF PLUG AND CHORD TYPE EQUIPMENT WITH MANUFACTURER AND IS REQUIRED TO PROVIDE ELECTRICAL OUTLETS THAT WILL ACCEPT MANUFACTURER'S SUPPLIED PLUGS.

SEE MECHANICAL DRAWINGS FOR ELECTRICAL REQUIREMENTS AND LOCATION OF A/C UNITS AND ALL OTHER MECHANICAL EQUIPMENT (SOLENOIDS, VAV'S, THERMOSTATS, PUMPS, FANS, SMOKE DETECTORS, DUCT HEATERS, ETC.) THE CONTRACTOR SHALL PROVIDE ALL BRANCH CIRCUIT AND CONTROL WIRING AS INDICATED OR REQUIRED AND IN CONFORMANCE WITH N.E.C. ARTICLE 440 AND MANUFACTURER'S RECOMMENDATIONS. ALL PENETRATIONS SHALL BE MADE WEATHERPROOF DURING CONSTRUCTION AND AFTER FINAL INSTALLATION. A/C EQUIPMENT WIRING, BREAKERS, AND FUSES ARE BASED ON A/C EQUIPMENT SPECIFIED ON CONTRACT DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL WIRING, AND OVERCURRENT PROTECTION REQUIREMENTS IF EQUIPMENT USED IS DIFFERENT FROM THAT SPECIFIED. CONTRACTOR SHALL MAKE THESE CHANGES AT NO ADDITIONAL COST TO THE OWNER.

C. TEMPORARY SERVICE. TEMPORARY ELECTRICAL POWER AND LIGHTING SHALL BE FURNISHED, INSTALLED AND MAINTAINED FOR ALL TRADES REQUIRING SAME. SYSTEM SHALL CONSIST OF DISTRIBUTION SYSTEM, PANELBOARDS, GROUNDING, BRANCH CIRCUITS, SWITCHES, RECEPTACLES, OUTLETS. SERVICE SHALL BE ARRANGED FOR WITH POWER COMPANY, IF REQUIRED.

D. PERMITS. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, STATE SALES TAX, FEDERAL EXCISE TAX, ROYALTIES AND OTHER TAXES OR FEES AS REQUIRED FOR INSTALLATION OF A COMPLETE SYSTEM AS OUTLINED HEREIN AND AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL SECURE ALL NECESSARY LICENSES AND INSURANCE.

E. BASIS FOR BIDS. EQUIPMENT SPECIFIED SHALL BE ADHERED TO. HOWEVER, OWNER HAS FINAL DECISION ON THE TYPE AND QUALITY OF EQUIPMENT TO BE SUPPLIED.

WITHIN 30-DAYS AFTER THE CONTRACT HAS BEEN EXECUTED, A FORMAL REQUEST FOR THE SUBSTITUTION OF PRODUCTS IN PLACE OF THOSE SPECIFIED WILL BE CONSIDERED, UNDER THE FOLLOWING CONDITIONS:

THE REQUEST IS ACCOMPANIED BY COMPLETE DATA ON THE PROPOSED SUBSTITUTION SUBSTANTIATING COMPLIANCE WITH THE CONTRACT DOCUMENTS INCLUDING PRODUCT IDENTIFICATION AND DESCRIPTION, PERFORMANCE AND TEST DATA, REFERENCES AND SAMPLES WHERE APPLICABLE, AND AN ITEMIZED COMPARISON OF THE PROPOSED SUBSTITUTION WITH THE PRODUCTS SPECIFIED, WITH DATA RELATING TO CONTRACT TIME SCHEDULE, DESIGN AND AESTHETIC EFFECT WHERE APPLICABLE.

THE REQUEST IS ACCOMPANIED BY ACCURATE COST DATA ON THE PROPOSED SUBSTITUTION IN COMPARISON WITH THE PRODUCT SPECIFIED, WHETHER OR NOT MODIFICATION OF THE CONTRACT SUM IS TO BE A CONSIDERATION. IF REDESIGN BY THE ARCHITECT OR HIS CONSULTANTS IS REQUIRED TO ACCOMMODATE AN ALTERNATE PRODUCT OR SYSTEM, ALL COSTS OF THIS REDESIGN SHALL BE BORNE BY THE CONTRACTOR REQUESTING THE CHANGE. IF ADDITIONAL WORK IS REQUIRED BY OTHER CONTRACTORS TO ACCOMMODATE AN ALTERNATE PRODUCT OR SYSTEM, ALL ADDITIONAL COSTS OF THIS WORK SHALL BE BORNE BY THE CONTRACTOR REQUESTING THE CHANGE.

THE REQUEST SHALL BE ACCEPTED OR REJECTED SOLELY AT THE DISCRETION OF THE OWNER WITH ARCHITECT'S OR ENGINEER'S WRITTEN APPROVAL.

F. CODES & STANDARDS. THE WORK PERFORMED UNDER DIVISION 16 SHALL COMPLY WITH THE LATEST EDITION AND REQUIREMENTS OF THE FOLLOWING:

APPLICABLE LOCAL CODES AND ORDINANCES, NATIONAL ELECTRICAL CODE, AS AMENDED BY LOCAL CODE, ALL APPLICABLE FEDERAL AND STATE CODES,, REGULATIONS AND STATUTES, APPLICABLE ENERGY CODE, OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA), UNDERWRITERS LABORATORIES, INC. (UL), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICANS WITH DISABILITIES ACT (ADA).

G. MATERIALS & EQUIPMENT. MATERIAL AND EQUIPMENT SHALL BE NEW, STANDARD, CURRENT PRODUCTS OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH EQUIPMENT, AND SHALL BE THE MANUFACTURER'S LATEST DESIGN.

ALL MATERIALS SHALL BEAR THE LABEL OF THE UNDERWRITERS LABORATORY FOR THE INTENDED USE OR SHALL BE MATERIALS APPROVED BY THE CODE ENFORCING AUTHORITIES AND THE ARCHITECT.

FOLLOW THE INSTALLATION DIRECTIONS AND RECOMMENDATIONS OF MATERIAL AND EQUIPMENT MANUFACTURERS.

ALL WORK SHALL BE PERFORMED BY WORKERS SKILLED IN THEIR RESPECTIVE TRADES AND ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER.

INSTALL EQUIPMENT, INCLUDING SWITCHES, CONTROLLERS, FIXTURES AND TRANSFORMERS SUCH THAT REMOVAL OR REPLACEMENT MAY BE READILY ACCOMPLISHED WITHOUT DAMAGE TO EQUIPMENT OR FASTENERS.

IDENTIFY ALL EQUIPMENT, INCLUDING SAFETY SWITCHES, STARTERS, TRANSFORMERS, PANELS, TERMINAL BOXES, MOTORS, SPECIAL OUTLETS, RELAYS. IDENTIFICATION SHALL CORRESPOND TO THE TERMINOLOGY ON THE CONTRACT DOCUMENTS.

EXAMPLES:
1. AHU #1 STARTER
2. TRANSFORMER T-4
3. EMERGENCY STOP STATION
4. PANEL BC

H. SUPPORTING DEVICES DEVICES, INCLUDING ANCHORS, FASTENERS, HANGERS AND SUPPORTS, SHALL BE OF A TYPE DESIGNED OR FABRICATED FOR THE PURPOSE, AND SHALL ADEQUATELY AND SAFELY SECURE THE MATERIAL AND EQUIPMENT AND PRESENT A NEAT APPEARANCE. USE DEVICES WITH CORROSION RESISTANT CHARACTERISTICS FOR THE ATMOSPHERIC CONDITIONS IN WHICH THEY ARE INSTALLED.

I. BACKBOARDS. USE 3/4" THICK EXTERIOR GRADE PLYWOOD, FIRE RETARDANT TREATED, OF WIDTH AND HEIGHT REQUIRED. PLYWOOD SHALL BE NEW AND PAINTED ON ALL SIDES AND EDGES. PAINT BACK SIDE WITH ASPHALTUM WHEN MOUNTED ON MASONRY.

PROVIDE BACKBOARDS FOR ALL GROUP-MOUNTED ELECTRICAL EQUIPMENT, AND FOR COMMUNICATIONS SYSTEMS AS CALLED FOR ON PLANS.

J. RACEWAYS & BOXES ROUTING OF RACEWAYS, INTERCONNECTING OUTLETS AND HOME-RUNS IS UP TO THE ELECTRICAL CONTRACTOR, BUT AFTER COMPLETION OF THE INSTALLATION, HE SHALL SUBMIT TO THE ENGINEER AS-BUILT DRAWINGS OF HIS WORK FOR FUTURE RECORD. DEVICE BOXES SHALL BE INSTALLED FLUSH, CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE INDICATED. ALL CONDUCTORS SHALL BE IN CONDUIT. FOR UNDERGROUND/IN-SLAB LOCATIONS USE GALVANIZED RIGID STEEL (GRS) CONDUIT OR SCHEDULE 40 PVC CONDUIT WITH GROUND WIRE SIZED AS INDICATED OR REQUIRED BY N.E.C., STUB-UPS FROM UNDERGROUND/IN-SLAB PVC CONDUIT SHALL BE GRS. UNDERGROUND GRS SHALL BE COATED WITH TWO COATS OF BITUMASTIC #50 APPLIED WITHOUT THINNING. ALL SECTIONS OF METALLIC CONDUIT SYSTEM SHALL BE GROUNDED AND ELECTRICALLY CONTINUOUS. USE ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR CONCEALED WIRING AND ELSEWHERE AS PERMITTED BY THE N.E.C. USE FLEXIBLE METAL CONDUIT FOR FLEXIBLE CONNECTIONS IN ALL WET LOCATIONS. INSTALL A NYLON PULL-CORD IN ALL EMPTY RACEWAYS FOR FUTURE USE. SIZE ALL GUTTERS AND PULL-BOXES PER NEC 370 AND 374. ALL PULL AND JUNCTION BOXES SHALL REMAIN ACCESSIBLE AT ALL TIMES.

ALL JUNCTION BOXES SHALL HAVE THE TYPE OF SYSTEM AND VOLTAGE OF CONTAINED CONDUCTORS STENCILED ON THE OUTSIDE OF THE BOX COVER.

EXAMPLES: POWER 120/208 SOUND
POWER 277/480 CONTROL 120 V
T.V. FIRE ALARM

INSTALL EXPOSED CONDUIT PARALLEL WITH OR AT RIGHT ANGLES TO THE BUILDING LINES. CONDUIT IN CONCRETE MEMBERS AND SLABS SHALL BE LOCATED SO AS NOT TO AFFECT THEIR STRUCTURAL STRENGTH. CONCEAL ALL CONDUIT IN WALLS, ABOVE CEILINGS, IN OR UNDER SLABS OR IN FURRING, EXCEPT IN MECHANICAL AND ELECTRICAL ROOMS.

ROUTE RACEWAYS TO AVOID CONFLICTS WITH THE WORK OF OTHER TRADES.

ALUMINUM CONDUIT WILL NOT BE PERMITTED.
MINIMUM SIZE OUTLET BOX SHALL BE 4" SQUARE BY 1-1/2" DEEP UNLESS APPROVED OR INDICATED OTHERWISE.
USE CAST METAL OUTLET BOXES WITH GASKETED COVERS FOR ALL EXTERIOR AND FOR ALL DAMP LOCATIONS.
PROVIDE APPROVED FIRE STOPPING MATERIALS AT ALL CHASES TO PREVENT DRAFTS, AT PENETRATIONS INTO RATED SPACES, AND OTHER LOCATIONS AS REQUIRED BY CODES.

PROVIDE CABLE SUPPORTS IN ACCORDANCE WITH NEC ARTICLE 300.

PROVIDE EXPANSION FITTINGS IN CONDUIT RUNS CROSSING EXPANSION JOINTS IN THE STRUCTURE.

K. CONDUCTORS. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS ARE #12 IN 1/2" CONDUIT. ALL CONDUCTORS SHALL BE COPPER. ACCEPTABLE INSULATION TYPES ARE TW, THW, THHN, THWN, AND XHHW, WITH USES AS RESTRICTED BY THE NEC. AMPACITIES OF CONDUCTORS IS TO BE BASED ON ARTICLE 310 OF THE NEC WITH UL LIMITATIONS: 60 DEG. RATING FOR SIZES #14 THROUGH #1; 75 DEG. FOR #1/0 AND LARGER. CABLES 3/0 AND LARGER SHALL BE TERMINATED WITH PRESSURE CRIMP CONNECTORS.

FOR 20 AMP BRANCH CIRCUITS GREATER THAN 100 FT. IN LENGTH, ONE WAY, UP TO 200 FT. USE #10 WIRE; OVER 200 FT., USE #8 WIRE.
INCREASE CONDUIT SIZE AS REQUIRED FOR THE LARGER CONDUCTORS. THIS SUPERSEDES WIRE SIZES CALLED FOR ON THE DRAWINGS.

CONDUCTORS SIZE #10 AND SMALLER SHALL HAVE INSULATION COLORED FOR PHASES A, B, C, AND N RESPECTIVELY AS FOLLOWS FOR 3 PHASE SYSTEM:

120/208 VOLTS: BLACK, RED, BLUE AND WHITE
120/240 VOLTS: BLACK, ORANGE (HIGH), BLUE AND WHITE
277/480 VOLTS: BROWN, ORANGE, YELLOW AND GRAY

ALL CONDUCTORS OF THE SAME PHASE IN PARALLELED FEEDERS OR SERVICES SHALL BE SOLIDLY CONNECTED TOGETHER AT THEIR TERMINATION IN A WIREWAY OR SPLICE BOX. MAKE CONDUCTOR LENGTH FOR PARALLEL FEEDERS IDENTICAL.

THE PHASE DESIGNATION OF ALL SECONDARY CONDUCTORS SHALL BE THE SAME AND SHALL BE INDICATED IN OR ON ALL 3 PHASE OUTLETS, TRANSFORMERS, PANELBOARDS, AND DISCONNECT SWITCHES, AND THEY SHALL BE CONNECTED WITH UNIFORM PHASE SEQUENCE.

MAINTAIN A, B, C PHASE RELATION LEFT TO RIGHT WHEN VIEWED FROM THE FRONT.

TAG ALL FEEDER CONDUCTORS AND IDENTIFY MAJOR CONDUITS IN OR AT WIREWAYS, PANELS, PULL BOXES, SWITCHBOARDS, MOTOR CONTROLLERS, CABINETS AND SIMILAR ITEMS TO ASSIST IN FUTURE CIRCUIT TRACING. CONDUCTOR TAGS SHALL BE NONCONDUCTIVE. IDENTIFICATION SHALL CORRESPOND TO THE CONTRACT DOCUMENTS.

COMMUNICATIONS, DATA, AND/OR WIRING WHICH IS NOT INSTALLED IN CONDUIT, AND WHICH IS ROUTED THROUGH ENVIRONMENTAL AIR SPACES, SHALL COMPLY WITH THE REQUIREMENTS OF NEC 300-22. PROVIDE TRAPEZE HANGER ASSEMBLY FOR PLENUM CABLES USING 3/8" DIAMETER HANGER ROD AND CHANNEL ASSEMBLY TO SUPPORT CABLE BUNDLES EVERY 4 FEET. ALL BUNDLES SHALL BE PROPERLY STRAPPED WITH SELF-LOCKING CABLE TIES. EXPOSED CABLES SHALL NOT LIE ON TOP OF CEILING TILES OR LUMINARIES.

L. GROUNDING. END-TO-END LIGHTING FIXTURES SHALL BE CONTINUOUSLY BONDED.

GROUNDING CONTACTS OF RECEPTACLES SHALL BE CONNECTED TO A SOLIDLY GROUNDED CONDUIT SYSTEM OR TO A SYSTEM GROUNDING CONDUCTOR (NOT THE SYSTEM NEUTRAL) BY A STRANDED COPPER WIRE NOT SMALLER THAN #12 AWG OR SHALL BE GROUNDED IN SOME OTHER APPROVED MANNER; THE RESISTANCE BETWEEN THE CONTACTS AND SERVICE GROUND SHALL NOT EXCEED 3 OHMS.

ALL CIRCUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR.

M. SAFETY SWITCHES/CIRCUIT BREAKER DISCONNECTS. SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE KD, FUSIBLE, OR NON-FUSIBLE, WITH POLES, AMPERE, VOLTAGE AND HORSEPOWER RATINGS INDICATED AND SHALL HAVE SOLID NEUTRALS. LUGS SHALL BE U.L. LISTED FOR COPPER-ALUMINUM.

ENCLOSURES FOR SAFETY SWITCHES SHALL BE NEMA-1, GENERAL PURPOSE, EXCEPT THAT SWITCHES INDICATED (WP) WEATHERPROOF, SHALL BE NEMA-3R ENCLOSURES WITH SUITABLE GASKETS AND BONDING MEANS.

SWITCHES AND DISCONNECT SHALL BE AS MANUFACTURED BY SQUARE "D", OR APPROVED EQUAL.

CIRCUIT BREAKER DISCONNECTS MAY BE USED IN LIEU OF SAFETY SWITCHES PROVIDING THEY COMPLY WITH THE SAFETY SWITCH REQUIREMENTS AND ARE SUPPLIED WITHIN THEIR RATINGS AND A SCHEDULE IS SUBMITTED FOR APPROVAL.

P. MOLDED CASE CIRCUIT BREAKERS. CIRCUIT BREAKERS SHALL CONFORM TO APPLICABLE FEDERAL SPECIFICATIONS AND NEMA STANDARDS. CIRCUIT BREAKERS SHALL BE OF THE AMPERE RATING, VOLTAGE RATING, NUMBER OF POLES AND CLASS OR INTERRUPTING CAPACITY (I.C.) AS INDICATED. INTERRUPTING RATINGS ARE GIVEN IN ROOT MEAN SQUARE (RMS), SYMMETRICAL AMPERES BASED ON NEMA TEST PROCEDURES. LUGS AND TERMINALS SHALL BE U.L. APPROVED FOR COPPER-ALUMINUM. ACCESSORIES SHALL BE 120 VOLT. A.I.C. OF BREAKER TO BE INSTALLED ON EXIST. PANELS SHALL MATCH EXIST.

EACH CIRCUIT BREAKER SHALL HAVE A TRIP UNIT FOR EACH POLE WITH ELEMENTS PROVIDING INVERSE TIME DELAY UNDER OVERLOAD CONDITIONS AND INSTANTANEOUS MAGNETIC TRIP FOR SHORT CIRCUIT PROTECTION UNLESS INDICATED AS NON-AUTOMATIC. TRIP ELEMENTS SHALL OPERATE A COMMON TRIP BAR TO OPEN ALL ELEMENTS. BREAKERS USED FOR SWITCHING SHALL BE RATED FOR SWITCHING DUTY.

O. FUSES. FUSES SHALL CONFORM TO NEMA AND U.L. AND SHALL BE OF THE VOLTAGE, CLASS AND AMPERE RATING INDICATED.

FUSES FOR MAIN DISCONNECT DEVICES SHALL BE HIGH INTERRUPTING CAPACITY, TIME DELAY, OR TYPE SUITABLE FOR DEVICE. PROVIDE ONE SPARE SET MOUNTED INSIDE THE CUBICLE, FOR EACH MAIN DEVICE.

FUSES FOR MOTORS AND ENCLOSED SWITCHES, NEMA CLASS K-5, UNLESS INDICATED OTHERWISE, DUAL ELEMENT, TIME DELAY. BUSSMAN – FUSETRON, FRN AND FRS, OR EQUAL.

OTHER FUSES SHALL BE AS INDICATED.

P. WIRING DEVICES. DEVICES SHALL BE AS SPECIFIED IN CONTRACT DOCUMENTS.

INSTALL PLATES AND COVERS ON ALL OUTLETS. INSTALL ALL DEVICES UNIFORMLY IN EACH AREA.

PLATES SHALL BE AUGNED VERTICALLY AND HORIZONTALLY AND ALL EDGES SHALL BE IN FIRM CONTACT WITH SURROUNDING WALL FINISH.

MOUNTING HEIGHTS (TO CENTER LINE OF BOX):

GENERALLY MOUNT RECEPTACLES 18" AFF (ABOVE FINISHED FLOOR) UNLESS NOTED OTHERWISE.
MOUNT SWITCHES AND DIMMERS AT 48" AFF.
MOUNT OUTLETS OVER MIRRORS 8" HIGHER THAN MIRROR.
MOUNT OUTLETS OVER COUNTERS AND CENTERED IN THE BACK SPLASH WHERE IT OCCURS; RECEPTACLE SHALL BE HORIZONTAL.

ADJUST OUTLET HEIGHTS IN CERAMIC TILE WALLS TO BE ENTIRELY IN OR ENTIRELY OUT OF THE TILE. OUTLETS MAY BE HORIZONTAL TO MEET SPACE CONDITIONS.

TEST EACH SOCKET OF EACH OUTLET WITH A DEVICE INTENDED FOR THE PURPOSE.

ALL DEDICATED DATA EQUIPMENT BRANCH CIRCUITS SHALL FEED THIS TYPE OF EQUIPMENT ONLY AND SHALL CARRY A DEDICATED GROUNDING CONDUCTOR TO THE PANEL TO BE CONNECTED TO THE GROUNDING SYSTEM.

III DEMOLITION

REMOVE EXISTING RECEPTACLES, TELEPHONE, SWITCHES, AND ANY ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED. RELOCATE ANY OF THESE DEVICES AS INDICATED OR REQUIRED BY THE DRAWINGS. PROVIDE ARCHITECT WITH AS-BUILT DRAWINGS OF FINAL INSTALLATION FOR RECORD PURPOSES. CONTRACTOR IS NOTIFIED THAT NOT ALL EXISTING DEVICES MAY HAVE BEEN INDICATED ON THE DRAWINGS AND THAT SOME EXISTING ELECTRICAL DEVICES MAY NOT HAVE BEEN SHOWN IN THEIR ACTUAL LOCATION. CONTRACTOR IS REQUIRED TO VISIT SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO DETERMINING THE WORK THAT NEEDS TO BE ACCOMPLISHED AS PART OF HIS/HER BID.

THE WORK SHALL INCLUDE THE FURNISHING OF ALL MATERIALS, CUTTING, EXTENDING, CONNECTING, REPAIRING, ADAPTING, AND OTHER WORK COINCIDENTAL HERETO, TOGETHER WITH SUCH TEMPORARY INSTALLATIONS AS MAY BE NECESSARY TO SATISFY THE DEMOLITION PROGRAM. APPROVAL SHALL BE SECURED FROM THE LANDLORD/ARCHITECT PRIOR TO CUTTING/DRILLING ANY STRUCTURAL SUPPORT.

ALL BUILDING CONSTRUCTION AFFECTED BY THE REMOVAL, RELOCATION, INSTALLATION OF ANY PIECE OF EQUIPMENT SHALL BE REPAIRED AND FINISHED AS REQUIRED TO MATCH EXISTING CONDITIONS OR AS DIRECTED BY THE ARCHITECTURAL DRAWINGS, SPECIFICATIONS, OR OWNER'S REPRESENTATIVE.

WHEN ELECTRICAL DEVICES ARE INSTALLED IN PARTITIONS OR CEILINGS TO BE REMOVED, THE ELECTRICAL CONTRACTORTRACTOR SHALL DISCONNECT THEM UP TO THE NEXT OUTLET TO REMAIN OR BACK TO THE PANELBOARD. IF EXISTING TO REMAIN OUTLETS ARE FED THROUGH DEMOLISHED PARTITIONS OR CEILINGS, THE CIRCUIT SHALL BE REARRANGED TO MAINTAIN CIRCUIT CONTINUITY. WIRE SHALL BE REMOVED BACK TO SOURCE FROM INACCESSIBLE RACEWAYS NOT REUSED. INSTALL BLANK PLATES ON FLUSH OUTLETS NOT REUSED. PLATE COLOR SHALL MATCH ADJACENT SURFACE AS NEAR AS POSSIBLE IN FINISHED AREAS.

ALL ELECTRICAL EQUIPMENT SHALL BE REMOVED FROM STRUCTURE TO BE REMOVED. ACCESSIBLE RACEWAYS, WIRES, BOXES, SWITCHES, AND OTHER ELECTRICAL ITEMS ASSOCIATED WITH THIS WORK SHALL BE REMOVED IF NOT REQUIRED FOR NEW EQUIPMENT TO CONTINUE IN SERVICE.

ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS DIRECTED BY OWNER.

GENERAL ELECTRICAL NOTES

1. ALL ELECTRICAL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH NEC 2017, FBC 2020, LOCAL CODES AND ORDINANCES AND ALL STANDARDS OF CONSTRUCTION ESTABLISHED BY THE LANDLORD.
2. SUBMIT SHOP DRAWINGS FOR ACCEPTANCE BY THE ARCHITECT AND/OR ENGINEER BEFORE PROCEEDING WITH THE PURCHASE OR INSTALLATION OF THE EQUIPMENT AND MATERIALS. NO FACSIMILES OR FACSIMILE COPIES SHALL BE ACCEPTED.
3. ALL CONDUCTORS SHALL BE THW OR THWN COPPER. ALL EXPOSED CONDUITS SHALL BE RUN AS NEAT AS POSSIBLE. P.V.C. CONDUIT SHALL ONLY BE USED IN SLAB OR UNDERGROUND AT A MINIMUM DEPTH OF 24 INCHES.
4. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTION TO ALL VIBRATING EQUIPMENT SUCH AS MOTORS, ETC.
5. ALL ELECTRICAL EQUIPMENT SHALL BE APPROVED AS SAFE FOR USE IN THE U.S. WORKPLACE, AS PER A "NRTL" RECOGNIZED ORGANIZATION (U.L., C.S.A., ETC.)
6. ALL EQUIPMENT SHALL BE MOUNTED ABOVE FLOOD CRITERIA.
7. PRIOR TO BID, THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS. NOTIFY THE ARCHITECT OR ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL QUALIFY THE BID ACCORDINGLY.
8. THE DESIGNATED NUMBERS ARE SHOWN ON THESE PLANS AS PER THE ORIGINAL DOCUMENTS OR SITE INVESTIGATION FOR THE EXISTING CONDITIONS AND ARE FOR IDENTIFICATION ONLY. CONTRACTOR SHALL VERIFY AND SHOW THE CIRCUIT NUMBERS ACTUALLY USED IN THE INSTALLATION ON THE "AS-BUILT" DRAWINGS.
9. CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE OF DEFECT IN WORKMANSHIP AND MATERIALS FOR A PRIOR OF ONE YEAR AFTER ACCEPTANCE OF THE PROJECT.

ELECTRICAL NOTES:

1. ALL CONTRACTOR WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
2. CONTRACTOR SHALL SEAL OFF CONDUIT RUNS
3. CONTRACTOR TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT
4. CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
5. NEUTRAL TO BE SUPPLIED FOR 230V-3 PHASE POWER.

SYMBOLS LEGEND

- G.F.I. RECEPTACLE 15 AMP/120 VOLT (TAMPER RESISTANT)
- JUNCTION BOX
- MOTOR

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PROJECT NO. 202201004

CITY OF OPA-LOCKA
LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

ELECTRICAL PLAN

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

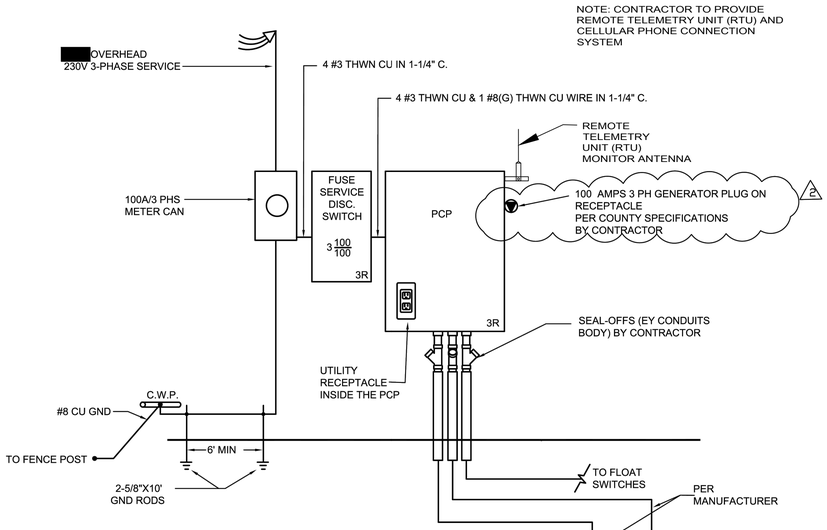
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DATE: 09-05-2022
SHEET NO. E-1



LOCATION MAP

N.T.S.

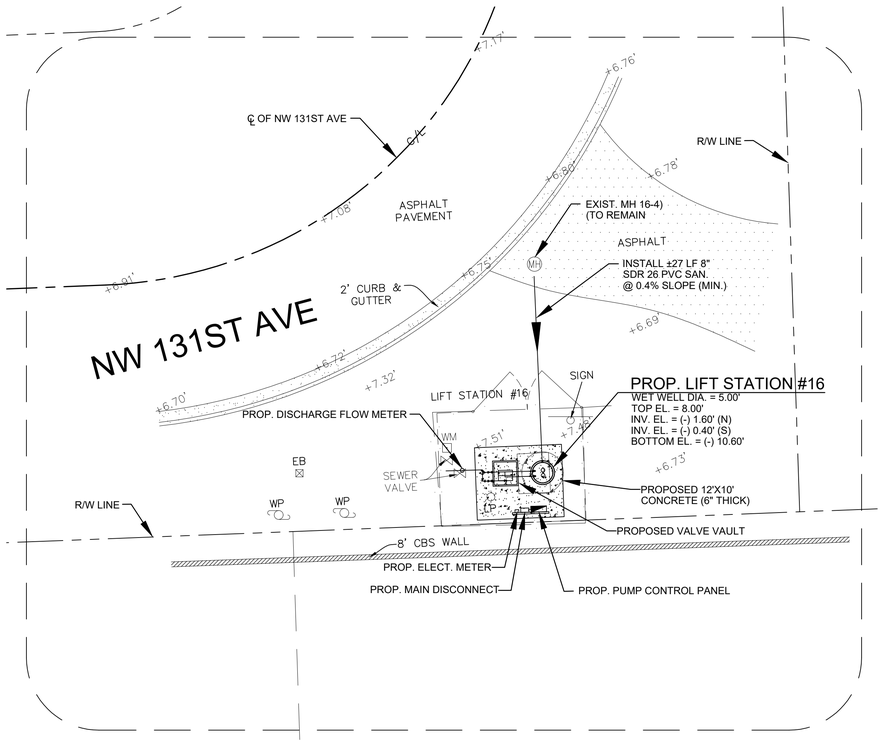


ELECTRICAL RISER DIAGRAM

N.T.S.

NOTES:

1. ENGINEER CALCULATED A FAULT CURRENT OF 5.50K AIC BASE ON CALCULATED FAULT CURRENT PROTEK RECOMMENDS 10K AIC. CONTRACTOR SHALL COORDINATE WITH FPL FOR ACTUAL FAULT CURRENT. EQUIPMENT INSTALLED SHALL WITHSTAND FPL'S AVAILABLE FAULT CURRENT. PRIOR TO ORDERING THE ELECTRICAL SWITCHGEAR THE CONTRACTOR SHALL OBTAIN FROM FPL A LETTER STATING THE AVAILABLE FAULT CURRENT. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
2. ALL EQUIPMENT TO BE MOUNTED ABOVE FLOOD CRITERIA.
3. COORDINATE NEW SERVICE REQUIREMENTS WITH FPL.



ELECTRICAL PLAN FOR LIFT STATION-16

1" = 10'

Assumed Fault Current Calculation

kVA = 500
E = 240
trans. FLA = 1203

I = kVA x 1000 = trans. FLA / E x 1.732

Isca = trans. FLA x 100 / transformer Z = 1203 / 5 %

Isca = ampere short-circuit current RMS symmetrical. Isca = 24,057 amperes

Fault Current from POINT TO POINT METHOD

	Length (distance) FEET	L =	90	Three Phase 240/120
	(ASC)	Isca =	24,057	
	# conductors per phase	N =	1	Copper in Nonmetallic Raceway
	Phase conductor constant	C =	4,635	Phase Conductor 3
'f ' factor = 1.732 x L x I / N x C x E L-N	Volt Line to Line	E L - L =	240	Volt
		f =	3.371	
	Neutral conductor constant	C =	4,635	Neutral Conductor 3
	Volt Line to Neutral	E L - N =	120	Volt
		f =	6.741	
Multiplier M = 1 / 1 + f	Line to Line	M =	0.229	
	Line to Neutral	M =	0.129	

Isca x M = fault current at terminals of main disconnect L- L = 5,504 amperes
Isca x M = fault current at terminals of main disconnect L- N = 3,108 amperes

LIFT STATION LOAD TABULATION

SERVICE VOLTAGE: 120/240V. Ø

DESCRIPTION	LOAD	AMPACITY
① SUBMERSIBLE WASTEWATER PUMPS	2 @ 5 HP	= 14.60 A
CPT + SPARE PROVISIONS	10KVA	= 24.04 A
CONNECTED LOAD		= 38.64 A
② SERVICE ENTRANCE =	38.64 A + (0.25)(7.3)	= 40.46 A

NOTES:
① AMPACITIES PER TABLE 430-150 OF THE NATIONAL ELECTRIC CODE.

② SERVICE ENTRANCE MINIMUM SIZE AS PER ARTICLE 230 OF THE NATIONAL ELECTRIC CODE.

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NORTH MIAMI BEACH, FL 33181
PH (954) 944-3272
FBPE NO. CA00029695
WWW.SSNENGINEERING.COM

SSN ENGINEERING

PROJECT NO. 202201004

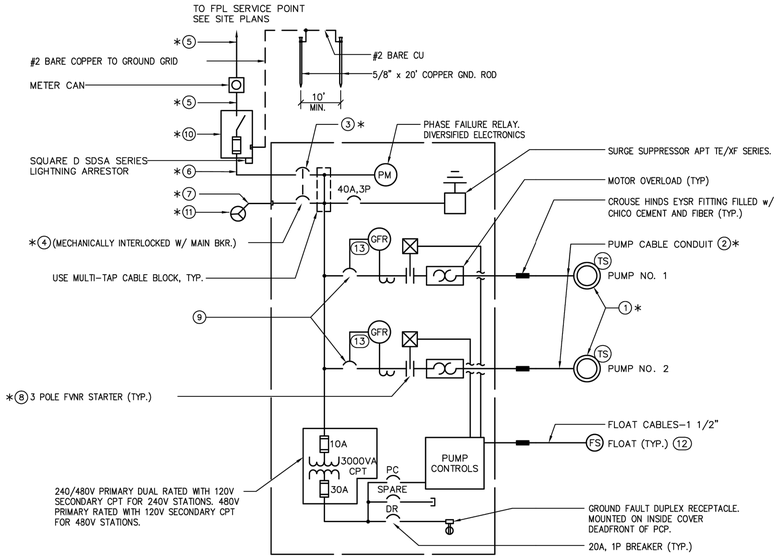
CITY OF OPA-LOCKA
LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

ELECTRICAL PLAN

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

Rubel Siddique
Digitally signed by Rubel Siddique
Date: 2023.05.05 14:32:20 -04'00'

DRAWN BY:	RS
CHECKED BY:	RS
DATE:	09-05-2022
SHEET NO.	E-2



NOTES:

(12) REFER TO CONTROL DIAGRAMS FOR EXACT NUMBER OF FLOAT SWITCHES REQUIRED.

(13) MOTOR CIRCUIT PROTECTOR WITH ADJUSTABLE MAGNETIC TRIN AND GROUND FAULT PROTECTION EQUIPMENT. OPENS MOTOR CIRCUIT PROTECTOR ON GROUND FAULT. PROVIDE ADDITIONAL ALARM CONTACT FOR COMMON ALARM INDICATION. GROUND FAULT CENSOR TYPE GC BY SQUARE D OR APPROVED EQUAL.

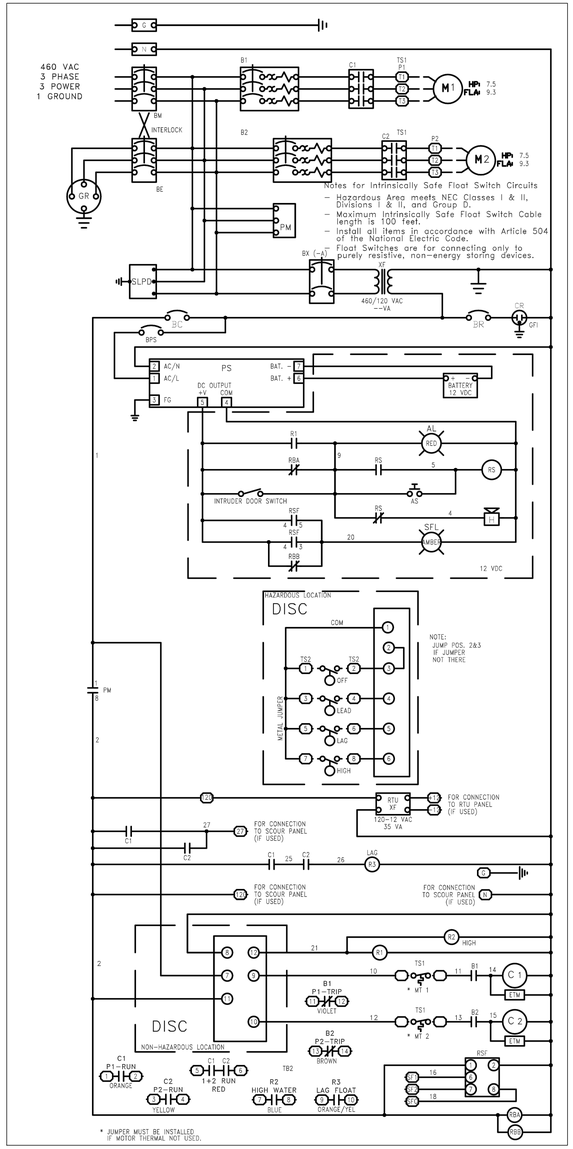
TYPICAL PUMP CONTROL PANEL (PCP) SINGLE LINE DIAGRAM

* ADDITIONAL REQUIREMENTS AND NUMERICAL DESIGNATIONS.

PCP CONTROL PANEL NOTES

CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR COMPLIANCE REVIEW AND APPROVAL BY OWNER / ENGINEER OF RECORD BEFORE INSTALLATION

STATION NUMBER	SERVICE VOLTAGE	EXISTING MOTOR SIZE (HP)	(1) NEW MOTOR SIZE (HP)	(2) PUMP CABLE CONDUIT SIZE	(3) PANEL MAIN BKR	(4) EMERGENCY MAIN BKR.	(5) SERVICE CONDUIT CONDUCTORS	(6) LOAD CONDUIT AND CONDUCTORS	(7) EMERGENCY CONDUCTORS	(8) STARTER SIZE	(9) MOTOR BREAKER	(10) FUSED SERVICE DISCONNECT SWITCH/FUSES	(11) GENERATOR RECEPTACLE
15	120/240V, 3ø, 4W	UNKNOW	2 @ 5	2"	100A,3P	100A,3P	4#2-1 1/2"	3#2 & 1#6GND-1 1/2"	3#2 & 1#6GND	1	50A,3P	100A,3P/ 100A	SUPPLIED BY CONTRACTOR



Notes for Intrinsically Safe Float Switch Circuits

- Hazardous Area meets NEC Classes I & II, Divisions 1 & II, and Group D.
- Maximum Intrinsically Safe Float Switch Cable length is 100 feet.
- Install all items in accordance with Article 504 of the National Electric Code.
- Float Switches are for connecting only to purely resistive, non-energy storing devices.

DUPLEX CONTROL DIAGRAM

N.T.S.

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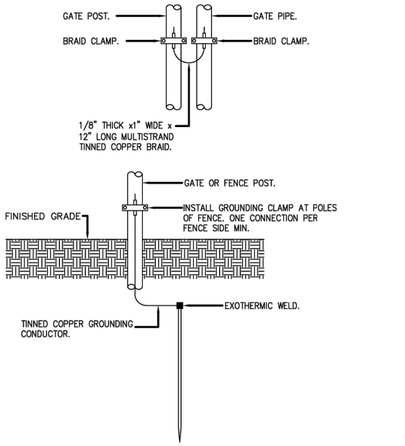
CITY OF OPA-LOCKA
LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

ELECTRICAL PLAN

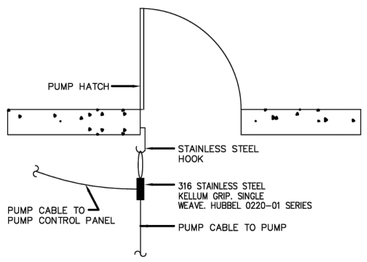
RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

Rubel Siddique Digitally signed by Rubel Siddique Date: 2023.05.05 14:32:41 -04'00'

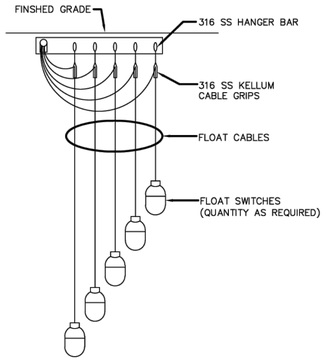
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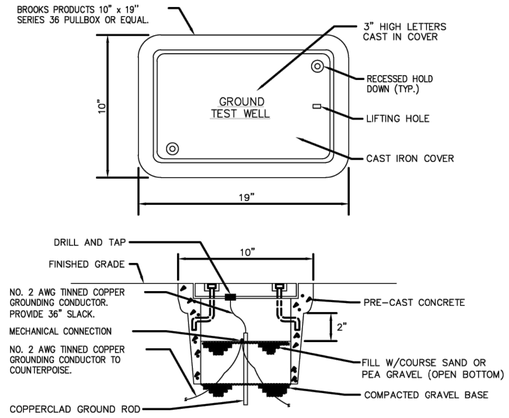
1 TYPICAL GATE OR FENCE POST GROUNDING
N.T.S.



2 PUMP CABLE MOUNTING DETAIL
N.T.S.

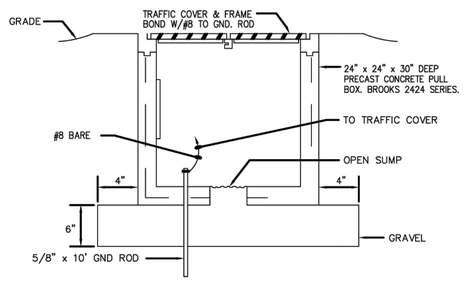


3 FLOAT SWITCH MOUNTING DETAIL
N.T.S.

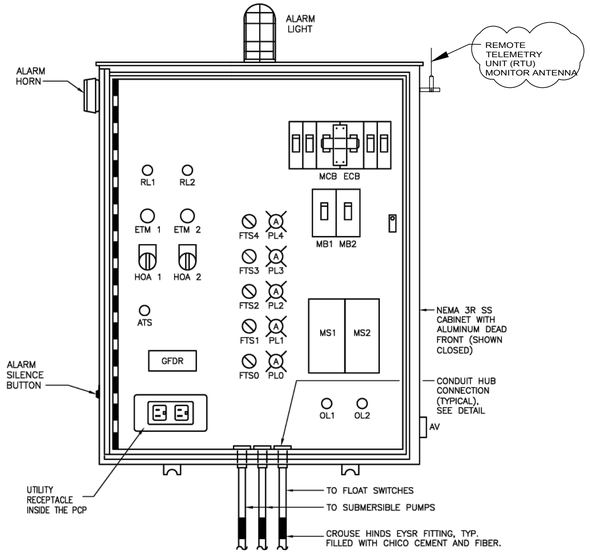


4 GROUND TEST WELL
N.T.S.

5 NFPA BOUNDARY CLASSIFICATION
N.T.S.



6 PULL BOX DETAIL
N.T.S.



NOTE: PANEL COVER NOT SHOWN

PUMP CONTROL PANEL FRONT VIEW
(TYPICAL FOR ALL LIFT STATIONS)
N.T.S.

NOTE: CONTRACTOR TO PROVIDE REMOTE TELEMETRY UNIT (RTU) AND CELLULAR PHONE CONNECTION SYSTEM

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PROJECT NO.
202201004

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LIFT STATION 16 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

ELECTRICAL PLAN

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

Rubel Siddique
Digitally signed by Rubel Siddique
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SHEET NO.
E-4

CITY OF OPA-LOCKA

"The Great City of Florida"

PROJECT SPECIFICATIONS

FOR

LIFT STATION 16 REHABILITATION



LOCATION MAP

PREPARED BY:

SSN ENGINEERING

DECEMBER, 2023

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 SCOPE OF WORK

A. This Section describes the project in general and provides an overview of the extent of the work to be performed under this Contract. Detailed requirements and extent of work is stated in the applicable Specification sections and shown on the Plans. The Contractor shall, except as otherwise specifically stated herein or in any applicable parts of the Contract Documents, provide and pay for all labor, materials, equipment, tools, construction equipment, and other facilities and services necessary for proper execution, testing, and completion of the work under this Contract.

1.02 CONSENT DECREE PROJECT

Not Applicable.

1.03 SPECIFICATIONS

A. The Specifications included in these Contract Documents establish the minimum performance and quality requirements for materials and equipment with the minimum standards for quality of the workmanship and appearance. Generally, there has been no attempt to separate the Specification sections into groups for the work of separate subcontractors, or for work to be performed by the various trades. Should there be any question as to the interpretation of any particular Specification section or part of Specification section, such question should be directed to the Department prior to the submittal of a proposal for the work under this Contract.

B. The work shown on the Plans is intended to be comprehensive and descriptive, not an exact and complete representation of the actual finished work. Installed work shall include fittings, joints, supports, nuts, bolts, and all other accessories required to provide complete and satisfactory systems as specified, even though some items may not be specifically shown on the Plans.

C. It is the intent of City to obtain a complete functional, satisfactory and legally operable installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein. The Contractor shall provide all materials for the project unless they are specifically called out in these specifications as being supplied by the Department. The Contractor shall also supply all other labor, material or equipment

required to preclude damage to or loss of functionality of any existing facility or system.

D. No request for additional compensation or Contract time (except for a non-compensable item extension at the sole discretion of the Engineer, whose decision shall be final) resulting from encountering utilities or structures not shown, or differing in location or elevation from that shown, will be considered. The Contractor shall explore sufficiently ahead of the Work to allow time for any necessary adjustments without delay to the progress of the installation. Cost due to delays occasioned by encountering utilities or structures which could have or should have been discovered by timely exploration ahead of the work shall rest solely with the Contractor.

1.04 REASONABLY IMPLIED PARTS OF THE WORK SHALL BE DONE THOUGH ABSENT FROM SPECIFICATIONS

A. Any part of the work which is not mentioned in the Specifications but is shown on the Plans, or any part not shown on the Plans but described in the Specifications, or any part not shown on the Plans nor described in the Specifications, but which is necessary or normally required as a part of such work, or is necessary or required to make each installation satisfactorily and legally operable, shall be performed by the Contractor as incidental work without extra cost to the City, as if fully described in the Specifications and shown on the Plans, and the expense thereof shall be included in the applicable unit prices or lump sum bid for the work.

1.05 DESCRIPTION OF WORK

A. The project consists of furnishing all materials, labor, and equipment necessary to Upgrade Sewage Pump Station No. 16, including, but not limited to, excavation, demolition and modification work including: Abandon existing dry well; Remove of dry well chimney; Remove of existing pumps, valves, piping, fittings, emergency discharge connection, existing sewer clean out plug, existing concrete slabs; existing wet well top slab; Remove and Replace in kind to match existing 6'(feet) chain link fence; Remove and Relocate as required: existing water meter and connect line to existing service; existing RTU antenna, existing electric box, existing concrete slab for electrical service; Relocate as required existing back flow preventer unit and water faucet, existing plug valve; furnish, installation, operation, and removal of temporary sewage effluent by-pass pumps, equipment and accessories; furnish and install wet well concrete top slab / new valve vault structure concrete and concrete top slab; furnish and install aluminum access hatches for wet well and valve vault and emergency connection; furnish and install new wet well protecting coating; furnish and install two (2) 4.60 HP submersible pumps and related equipment; furnish and install bubbler control system and related equipment; furnish and install new meter and main disconnect; furnish and install the proposed power/control system inclusive of the necessary electrical panel, enclosure, telemetry system and related equipment; install electrical conduits and junction boxes; install R.T.U. panel and S.C.A.D.A. equipment furnished by the Department; electrical work;

mechanical work: furnish all materials, equipment and supplies necessary for pump station startup and testing; furnish and install sewage force main pipe and fittings; connection to existing sewage force main; replacement of any sod, sidewalk, pavement damaged during construction; site restoration; and other appurtenant and miscellaneous items for a complete, satisfactory and functional installation.

B. Pumping Station No. 16 is located at NW 43rd Ave South of NW 133rd St in Section 29, Township 52, Range 41, Miami-Dade County, Florida.

C. It is the intent of the department to obtain a complete and working installation under this Project and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.06 TESTING

A. Testing procedures shall be submitted to the Engineer as Shop Drawings and will be subject to review and approval. The Department reserves the right to require test procedure and equipment changes and revisions to the extent considered appropriate by the Engineer whose decision shall be final. The Contractor is advised that all testing shall be carried out in accordance with the best practices of the trade, best management practices (bmp) and as recommended in writing by the engineering/technical/test staff of the manufacturer of the equipment and he should plan and price his test work accordingly. In no case will test recommendations of a manufacturer's sales or management groups be considered sufficient. All necessary temporary power sources, load banks, test materials, test instrumentation, qualified test personnel including manufacturer's representatives, fuels and lubricants shall be provided by the Contractor and shall be as approved by the Engineer and, if not approved, the Contractor shall change the item(s) to the satisfaction of the Engineer. Where required by the Engineer, testing shall be carried out utilizing Contractor-supplied power sources and load banks prior to any connection with FPL. The Contractor shall include in his prices bid all costs for testing and no extra compensation will be allowed.

B. Factory testing of equipment is in all cases required and test data from these tests shall be provided to the Engineer prior to shipment. The Department will decide when to send its personnel or representatives to the factory for witness testing of equipment. Travel expenses for Department personnel or representatives are paid for by the Department. Repeat tests due to unsuccessful tests will be borne by the Contractor. To establish a base line, the Bidder will assume that any piece of equipment with an invoice cost to the Contractor of one hundred thousand dollars ($100,000) or more will require witnessed testing. The City will in the Specifications try in all cases to note which items will require testing.

C. On site testing shall conform to the protocol previously approved by the Engineer, and shall include testing and calibration prior to energizing of individual cubicles followed by testing and calibration as a whole system or group of systems. The Contractor shall supply all material, equipment, power, time, and fully qualified

specialist personnel to perform all system integration work as necessary to provide systems that talk to one another and correctly react to one another, including systems that must communicate with, and react to existing systems, and systems being or to be installed by others. It is an absolute requirement that upon completion, all systems installed in the Work be able to correctly communicate and react to one another and to systems in existence, being or to be installed, external to the Work. Final testing and calibration will be performed with the equipment energized and will only take place when the Engineer is satisfied with the results of earlier tests. Full written reports of tests and results shall be furnished by the Contractor to the City. All costs for this testing, calibration, system integration and reporting, including the costs for factory and specialist personnel required during testing, calibration and system integration, shall be included in the prices bid and no extra compensation will be allowed. Any delays or costs occasioned by test procedures or results not being satisfactory to the Engineer shall rest solely with the Contractor and no extra time or compensation will be allowed. All on-site testing shall be witnessed by City, and the Contractor shall make timely arrangements and fully coordinate tests with the Engineer.

D. After installation is completed, the Contractor shall provide records of non-destructive electrical insulation tests performed by a certified institution approved by the Engineer, witnessed by the City personnel and attesting that the dielectric condition of the equipment and wiring is acceptable.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01011

SITE CONDITIONS

PART 1 GENERAL

1.01 SITE INVESTIGATION AND REPRESENTATION

A. The Contractor acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation; disposal, handling and storage of materials; availability of labor, water, electric power, roads; disposal of water from construction; uncertainties of weather; the conformation and conditions at the ground; the type of equipment and facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this Contract.

B. The Contractor further acknowledges that he has satisfied himself as to the character, quality, and quantity of surface and subsurface materials to be encountered from inspecting the site and from evaluating information derived from exploratory work that may have been done by the City or included with these Contract Documents. Any failure by the Contractor to acquaint himself with all the available information will not relieve him from responsibility for properly estimating the difficulty or cost thereof under this Contract.

C. The Contractor acknowledges that by personal field observation or other means satisfactory to himself, performed prior to the bid, he has included in the prices bid all costs for dealing with all construction problems created by observable above or on grade features on or adjacent to the site of the work whether these features are shown on the Plans or described in the Specifications. In instances where the observable features indicate subsurface conditions which may affect the Project work, as for example, a pavement patch or catch basin gratings indicating respectively a utility or storm sewer not shown on the Plans, the Contractor acknowledges that he has made timely, diligent, inquiry of the Engineer or by other means fully satisfied himself prior to the bid as to the nature of, and costs created by, the subsurface condition and included all costs therefore in the prices bid.

1.02 INFORMATION ON SITE CONDITIONS

A. All information obtained by City regarding the site conditions, topography, subsurface information, ground water elevations, existing construction of site facilities as applicable, and similar data will be made available to the Contractor in the Contract Documents. Such information is offered as supplementary information only. Neither the Engineer nor MDWASD assumes any responsibility for the completeness or for the Contractor's interpretation of such supplementary information. Prior to bidding and after written approval from MDWASD, bidder

may make his own survey investigations to satisfy himself with site conditions at his own cost.

B. Subsurface investigations, including test borings, have been made to indicate subsurface conditions at locations in the Project.

C. Prospective bidders are advised, at their own expense, to make such subsurface investigation, by boring or test hole excavation, as may be desirable. However, such work is to be scheduled by appointment with the Engineer if on a City site or by notification to the City and properly permitted if in the public right of way.

1.03 DIFFERING SUBSURFACE CONDITIONS

A. In the event subsurface or latent physical conditions are found materially different from those indicated in these Documents, and differing materially from those ordinarily encountered and generally recognized as inherent in the character of work covered in these Contract Documents, promptly, and before such conditions are disturbed, notify the Engineer in writing of such changed conditions.

B. The Engineer will investigate such conditions promptly and following this investigation, the Contractor shall proceed with the work, unless otherwise instructed by the Engineer. If the Engineer finds that such conditions do so materially differ as to cause an increase or decrease in cost and time considered reasonable by the Engineer, the City will make the final decision regarding any adjustment in cost or time for completion.

C. In the event that site conditions differ from those expected by the Contractor, the Contractor shall proceed to complete the work as contemplated by the Plans and Specifications at his own cost and expense. If in the discretion of the Engineer, the difference in site conditions renders completion of the work as described by the Plans and Specifications impossible, the Engineer may alter the work, whereupon the Contractor shall be compensated for any extra work in accordance with Section 13 "Extra Work and Payment Therefore" of the General Covenants and Conditions; the Engineer shall not alter the work where the site conditions render the work more difficult or costly to perform, if such work is otherwise still possible as described in the Contract Documents.

1.04 EXISTING UTILITIES AND LOCATION SERVICES

A. Known utilities and structures adjacent to or encountered in the work are shown on the Plans. The locations shown are taken from existing records and the best information available from existing plans. However, it is expected that there may be some discrepancies and omissions in the locations and quantities of utilities and structures shown. Those shown are for the convenience of the Contractor only, and no responsibility is assumed by either MDWASD or the Engineer for their accuracy or completeness. **No request for additional compensation or**

Contract time (except for a non-compensable time extension at the sole discretion of the Engineer, whose decision shall be final) resulting from encountering utilities or structures not shown, or differing in location or elevation from that shown, will be considered. The Contractor shall explore sufficiently ahead of the work to allow time for any necessary adjustments without delay to the progress of the installation. Costs due to delays occasioned by encountering underground utilities or structures which could have or should have been discovered by timely exploration ahead of the Work shall rest solely with the Contractor.

B. Prior to proceeding with excavation the Contractor shall contact all utility companies and all other users of the right-of-way in the area to aid in locating their underground services. It shall be the Contractor's responsibility to contact utility companies at least three Normal Working Days before starting construction. The Contractor shall proceed with caution in the excavation and preparation so that the exact location of underground utilities may be determined. The Contractor shall comply with Chapter 556, F.S. "Underground Facility Damage Prevention and Safety Act", Chapter 553, F.S. "Florida Trench Safety Act, Part IV", Chapter 368, F.S., "Florida Gas Safety Law, Part 1, and OSHA Standard 1926.651.

C. It is the responsibility of the Contractor to ensure that all utility or other existing facilities, the stability of which may be endangered by the close proximity of excavation, are temporarily held in position while work proceeds in the vicinity of the facilities and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.

D. The Contractor shall take all reasonable precautions against damage to existing utilities. However, in the event of a break in an existing water main, gas main, sewer or underground cable, the Contractor shall immediately notify the responsible official of the organization operating the interrupted utility. The Contractor shall lend all possible assistance in restoring services and shall assume all cost, charges, or claims connected with the interruption and repair of such services, as determined by the Department.

1.07 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

A. Where the Contractor's operation could cause damage or inconvenience to railway, telephone, fiber optic, television, electrical power, oil, gas, water, sewer, irrigation system, or any other utility, the Contractor shall make all arrangements necessary for the protection of these utilities and services.

B. Notify all utility companies that are affected by the construction operation at least 48 hours in advance. Under no circumstance expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities and utility poles where necessary. **Absolutely no extra compensation will be allowed for construction problems created by utility**

poles of whatever size, overhead electric, telephone or other lines, whether shown on the Plans or not. The Contractor is solely responsible for discerning such items in the field prior to bidding and including all costs for such work in the prices bid.

C. The Contractor and his subcontractors shall be solely and directly responsible to the owners and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.

D. Neither the City nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.

E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no event shall interruption of any utility service be allowed unless granted by the owner of the utility. In the event water service lines that interfere with trenching are encountered, the Contractor may, by obtaining prior approval of the water utility, cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense and as approved by the Engineer.

G. Replace, with material approved by the Engineer, at Contractor's expense, any and all other laterals, existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents and as approved by the Engineer.

1.08 INTERFERING STRUCTURES

A. Take necessary precautions to prevent damage to existing structures whether on the surface, above ground, or underground. An attempt has been made to show major structures on the Plans. While the information has been compiled from the best available sources, its completeness and accuracy cannot be guaranteed, and is presented as a guide. The Contractor is solely responsible for field verification of all locations.

1.9 FIELD RELOCATION

A. During the process of construction, it is expected that minor relocations of the work may be necessary. Such relocations shall be made only by the direction of the Engineer at the Contractor’s expense. If existing structures are encountered that will prevent construction as shown, notify the Engineer before continuing with the work in order that the Engineer may make such field revisions as necessary to avoid conflict with the existing structures. If the Contractor fails to notify the

Engineer when an existing structure is encountered, and shall proceed with the work despite this interference, the Contractor does so at his own risk.

B. Representatives of utility companies, the railroad companies, the traffic and transportation authorities, etc., shall be notified in accordance with the provisions set forth in the relevant sections of the Specifications and the permitting documents.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01016

SAFETY REQUIREMENTS AND PROTECTION OF PROPERTY

PART 1 GENERAL

1.01 CONTRACTOR'S RESPONSIBILITY FOR SAFETY

A. Conduct whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees) and property during the Contract period. This requirement shall apply continuously and not be limited to normal working hours.

B. Neither the Professional activities of the Design Professional, nor the presence of the Design Professional nor his or her employees and subconsultants at a construction site, shall relieve the Contractor and any other entity of their obligations, duties and responsibilities including but not limited to, construction means, methods, sequence techniques or procedures necessary for performing, superintending, or coordinating all portions of the Work of construction in accordance with the Project Documents and any health and safety precautions required by any regulatory agencies.

1.02 MANDATORY SAFETY TRAINING AT WATER AND SEWER TREATMENT PLANTS

A. The Contractor shall coordinate with the Construction Manager and thereafter the Water and Sewer Department Safety Office to arrange for a mandatory (PSM) Project Safety Management training for all his personnel who will be on site. This training must be completed prior to mobilization or any other work on site. The Contractor shall also be responsible that all on-site personnel of his subcontractors, at whatever tier, receive this training. The training normally takes about 2 to 3 hours and is held at the project site.

1.03 FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS

A. Safety provisions shall conform to the Federal and State Departments of Labor Occupational Safety and Health Act (OSHA), and all other applicable Federal, State, County, and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of these Project Documents. Where any of these are in conflict, the more stringent requirements shall be followed. Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.

B. All open excavations made in the earth shall be performed in compliance with the State of Florida Trench Safety Act, OSHA 29 CFR 1926 Subpart P (Chapter 90-96, Laws of Florida). The Contractor shall appoint a "competent person", in

accordance with Subpart P, who shall be present at the jobsite. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

C. The Contractor shall familiarize himself with the "Underground Facility Damage Prevention and Safety Act", Florida Statute 556. The Contractor shall contact the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via www.sunshine811.com) at least forty-eight hours prior to any excavation. Failure to familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.

D. Conduct operations in such a manner utilizing warning devices, such as traffic cones, barricades and warning lights that traffic, pedestrian and Department personnel are given adequate warning of hazards of the worksite as may be deemed necessary by the Department, Engineer of Record, and governing agency having jurisdiction over the work or political subdivision.

E. The Contractor shall be in compliance with all applicable provisions of the OSHA Code of Federal Regulations (CFR), including, but not limited to, the following:
   1. Process Safety Management (29 CFR 1910.119)
   2. Personal Protective Equipment (29 CFR 1910.132)
   3. Respiratory Protection (29 CFR 1910.134)
   4. Confined Space Entry Procedures (29 CFR 1910.146)
   5. Lockout/Tagout (29 CFR 1910.147)
   6. Industrial Truck / Forklift (29 CFR 1910.178)
   7. Electrical Safety (29 CFR 1910.301)
   8. Commercial Diving (29 CFR 1910.401)
   9. Air Monitoring (29 CFR 1910.1000)
   10. Asbestos & Lead Abatement (29 CFR 1910.1001, 1025)
   11. Blood Borne Pathogens (29 CFR 1910.1030)
   12. Crane Operations (29 CFR 1926 & ANSI)
   13. Fall Prevention Protection (29 CFR 1926.104)
   14. Welding and Cutting (29 CFR 1926.350)
   15. Scaffolding (29 CFR 1926.451)
   16. Excavation Protection (29 CFR 1926.650)
   17. Movement of Traffic (FDOT Index)

1.04 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

A. The Contractor shall at all times provide proper facilities for safe access to the Work by authorized government officials.

1.05 CONSTRUCTION SAFETY PROGRAM

A. Develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor's Manual of Safety Practices outlining the firms policies on field safety procedures for employees shall be submitted to the Engineer for review before "Notice to Proceed" will be issued. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.

B. Certain products specified in these specifications contain warnings by the manufacturers that under certain conditions, if instructions for use are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.

C. The duty of the Engineer to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's Safety Supervisor, the safety program, or any safety measures taken in, on, or near the construction site.

1.06 SAFETY EQUIPMENT

A. As part of the safety program, maintain at an office or other well-known place at the jobsite, safety equipment applicable to the Work as prescribed by the governing safety authorities, all articles necessary for giving first-aid to the injured, and establish the procedure for the immediate relocation to a hospital or a doctor's care of any person who may be injured on the jobsite.

B. Perform all necessary work to protect all personnel and the general public from hazards, including, but not limited to, surface irregularities or unramped grade changes, and trenches or excavations. Furnish barricades, lanterns, and proper signs to safeguard all persons and work.

C. The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, shoring, logging, machinery guards and the like, shall be in accordance with the applicable governing safety authorities.

D. During construction, construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railings, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards. All such barriers shall have adequate warning lights as necessary, or required, for safety.

E. There shall be no oil dripping from equipment or oil spills.

1.07 STORAGE OF HAZARDOUS MATERIALS

A. The material shall be stored and handled in a proper and safe manner and upon its use, immediately dispose of the containers, cans, rags and remnants of the

material in a manner approved by the Department of Environmental Resources Management (DERM) at the Contractor's sole cost. The Contractor is not allowed to store empty containers at the site. In case of any violation, the Engineer will report such violation to DERM and the Contractor shall be subject to all penalties and fines as required by State and County regulations.

B. The Contractor is hereby cautioned that he cannot store any environmentally hazardous materials such as solvents, greases, lubricants or any other type of chemical substances at the Pump Station site. The Contractor shall be allowed to keep only such materials at the site for immediate use.

1.08 ACCIDENT REPORTS

A. If death, serious injuries, or serious damages are caused, report the accident immediately by telephone or messenger to the Engineer. In addition, the Contractor must promptly report in writing to the Engineer and the City all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

B. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, promptly report the facts in writing to the Engineer and the City, giving full details of the claim.

1.09 TRAFFIC SAFETY AND ACCESS TO PROPERTY

A. Comply with all rules and regulations of the city, state, and county authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the City and the controlling authority. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved barricades, signs, and lights where necessary for the safety of the public. The convenience of the general public and residents and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.

B. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained with temporary asphalt that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Access to businesses, schools and homes along the route of the work shall be provided by the Contractor at all times. Cleanup operations shall follow immediately behind backfilling and the worksite shall be kept in an orderly condition at all times.

C. Supply flagmen and guards or Police when they are required by regulation, when deemed necessary for safety, or required by the Engineer. Flagmen and Guards

shall be furnished with approved orange wearing apparel and other regulation traffic control devices.

1.10 FIRE PREVENTION AND PROTECTION

A. Perform all work in fire-safe manner. Furnish and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

1.11 DECLARED STATE OF EMERGENCIES

HURRICANE

A. Hurricane Preparedness: During such periods of time as are designated by the United States Weather Bureau as being a hurricane alert, the Contractor shall perform all precautions as necessary to safeguard the work and property, including the removal of all small equipment and materials from the site, lashing all other equipment and materials to each other and to rigid construction, and any other safety measures as may be directed by the Engineer.

B. Prior to the Start of Work: The Contractor shall submit for approval, a Plan of Action for the specific actions to be taken on his particular projects during a hurricane watch and hurricane warning.

C. Upon Notification of a Hurricane Warning

1. Formal notification to the Contractors to implement their approved Plan of Action to protect the project and the public.
2. For construction projects at a Plant or Pump Station, a copy of the notifications will be provided to the Plant Superintendent or, for Pump Stations, to the Engineer. The Plant Superintendent or Engineer may notify the Construction Superintendent of any assistance he may need for the Contractor in order to secure the Plant or Pump Station.
3. For pipeline construction projects within the public right-of-ways, the Contractor will be notified by the Construction Manager Office to suspend his construction operations. The Contractor will backfill all open trenches, remove all construction equipment and materials from the right-of-way, remove unnecessary traffic barricades and signs, secure remaining barricades by "half burial" or "double sand bags".

POST DISASTER WORK

A. In the event of a disaster declaration by the Local or State governing authorities, the Department may choose to obtain the services of the Contractor to perform

work made an imminent priority for the disaster event. The compensation for the additional work caused by the disaster shall be negotiated between the Engineer and the Contractor with written approval provided by both parties prior to mobilizing at the designated location or locations. The value of the work performed shall be up to the amount of the original contract with contingencies and dedicated allowances.

1.12 JOINT SURVEY TO ESTABLISH AUTHENTICITY OF POSSIBLE DAMAGE CLAIMS

A. The Contractor shall maintain vertical and horizontal survey control points on all structures and improvements, located in the vicinity of the work prior to beginning work, and shall periodically check the points for movements with copies provided to the Engineer, of the survey notes for each survey and a copy of the layout of the survey control points.

B. After the contract is awarded and before commencement of work, the Contractor shall perform a thorough examination of existing buildings, structures, and other improvements in the vicinity of the work, as applicable, which might be damaged by his operations.

1. Examinations of existing structures, buildings, and other improvements in the vicinity of the work shall be done by the Contractor. The scope of the examination shall include cracks in the structures, settlement, leakage, and similar conditions. The City assumes no responsibility for pre-existing conditions of the structure.

2. Records in triplicate of all observations shall be prepared by the Contractor, photographs shall be taken by the Contractor signed and dated, with descriptive information and in the manner specified above. One signed copy of every document and photograph will kept on file in the office of the Engineer. Video recording also required.
3. The above records are intended to be used as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the Contractor and the City, and will be a means of determining whether and to what extent damage, resulting from the Contractor's operations, occurred during the Contract work.

C. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. Preconstruction videos and digital pictures shall be taken with date stamps of the entire area of work. A copy of all such notices shall be forwarded to the City.

1.13 TRAFFIC CONTROL AND USE OF PUBLIC STREETS

A. The Contractor shall be responsible for traffic control as specified hereinafter. Any reference to Miami-Dade County, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas of streets or their departments, published regulations, permits, or data. Abide by all applicable laws, regulations and codes thereof, pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.

B. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control and other provisions, throughout the project as required by the Metropolitan Dade County Department of Public Works, Traffic Engineering Division (Traffic Division). Traffic shall be maintained according to corresponding typical traffic control details as outlined in the Dade County Public Works Manual. No street shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.

C. If required by the Traffic Division, employ the required number of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. If required for traffic control permits or agencies, the Contractor shall work odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction.

D. The Contractor shall provide all barricades and/or flashing warning lights necessary to warn motorist of the construction throughout the project.

E. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. Provide necessary access to all adjacent property during construction.

F. The contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Dade County Public Works Manual. In addition, provide for the resetting of all traffic control and information signing removed during the construction period.

G. Where excavations are to be made in the vicinity of signalized intersections, attention is directed to the fact that vehicle loop detectors may have been embedded in the pavement. Verify these locations by inspecting the site of the work and by contacting the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via www.sunshine811.com) . Any loop detector which is damaged, whether shown on the Plans or not, shall be repaired or replaced to the satisfaction of the Traffic Division.

H. Notify the Traffic Division 24 hours in advance of the construction date, and 48 hours in advance of construction within any signalized intersection.

I. Temporary pavement will be required over all cuts in pavement areas, and also where

traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed and the swale or median area restored to their previous condition.

1.14 WORKING IN CONFINED SPACES

Where a Contractor needs to work in a confined space, the Contractor must comply with the General Industry, OSHA Confined Space Standard, 29 CFR 1910.146 or the equivalent Confined Space Standard in CFR 1926, Safety and Health Regulations for Construction Standards.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01031

GRADES, LINES AND LEVELS

PART 1 - GENERAL

1.01 SCOPE

This work of this Section comprises the establishing of grades, lines and levels.

1.02 RELATED WORK

Section 01720 - Project Record Documents
Section 01725 - Project As-Builts

PART 2 - PRODUCTS

2.01 Materials:

Furnish all stakes, templates and other materials necessary for establishing and maintaining of the lines and grades necessary for control and construction of the Work and all incidental labor necessary for the prosecution of the Work.

PART 3 - EXECUTION

3.01 LAYOUT OF THE WORK:

A. GENERAL

1. The Engineer of Record, through retaining the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida, shall furnish the Contractor with horizontal and vertical controls which shall be utilized as specified elsewhere herein to layout the work. The Professional Land Surveyor and Mapper, who is licensed in the State of Florida hired by the Contractor, shall verify all controls provided by the Engineer of Record and it shall be the responsibility of the Contractor to preserve same.

2. The Contractor shall retain the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida who, shall furnish and set stakes, establishing line and grade and shall solely be responsible for the layout of the work as well as the recording of all as-built dimensions and elevations. The Contractor shall furnish all additional stakes, templates, and other materials for marking and maintaining survey points and lines given, and shall be responsible for their preservation. Should any of the horizontal and vertical control points set by the Engineer of Record be

destroyed or disturbed, they shall be reset by the Contractor's Florida Registered Land Surveyor and Mapper, at the Contractor's expense. All control points previously set by the Engineer of Record shall be verified by the Contractor's surveyor.

B. LAYOUT

As provided in Subsection 3.01-A, above, the Contractor through the services of his Florida Registered Land Surveyor and Mapper, shall establish the line and bench mark and other reference points for the pipeline or structure, as follows:

1. Structures: Will consist of baselines, stakes at building corners, centers and centerlines, auxiliary lines and two bench marks from which to establish the elevations. The Engineer of Record shall set a minimum of three horizontal and vertical control points which shall thereafter be maintained by the Contractor, without further help from the Engineer of Record, for use in establishing and checking the lines and grades as shown on the contract drawings.

2. Pipelines: Will consist of baselines, construction lines, centerlines, auxiliary lines and bench marks from which to establish the elevations. The Engineer of Record shall set horizontal and vertical control points at the beginning and end of the work and at a minimum distance of 1,400 ft. in between. When the total distance is less than 1,400 ft. control points shall be set at the beginning and end of the work.

3. The Contractor shall use this information to construct the structures and pipelines to the lines and grades shown on the project drawings and shall supply all equipment and personnel necessary to accomplish this end.

4. For pipelines, this will consist of establishing all points of bend (but not necessarily bevel pipe unless in close proximity to other facilities), valves, tees, crosses and other stations not more than 100 feet apart along the proposed centerline of the pipe, or along a stationed offset line as shown on the Plans, marked by a nail in a metal cap if in pavement, with the station painted nearby or by a nail in the top of a wooden stake driven flush with the ground with the station marked on the flag stake nearby, if not in pavement.

5. The Contractor shall supply the Department Inspector with a copy of the Florida Registered Land Surveyor and Mapper's layout of the work immediately upon its availability to his own forces.

6. The Contractor shall make his equipment and men available to the Inspector for spot checking the accuracy of the pipe laying. The Inspector shall require the Contractor to correct pipe alignment when necessary.

C. RECORD DRAWINGS:

1. During the entire construction operation, the Contractor shall retain the services of a State of Florida Registered Land Surveyor and Mapper who shall maintain records of

the installation, including all deviations from the Plans and Specifications by obtaining "as-built" dimensions and elevations.

2. The Surveyor shall prepare Record As-Built Drawings showing correctly and accurately all changes and deviations made during construction, including approved construction variances, to reflect the work as it was actually constructed.

3. Refer to Sections 01720 and 01725 for Department's criteria for developing project record documents and record As-Built drawings.

D. HORIZONTAL AND VERTICAL CONTROL FOR DESIGN

The following shall apply when establishing horizontal and vertical controls for design. They shall also be used for the development of construction drawings.

1. Survey stationing shall proceed from south to north and/or from west to east.

2. Baseline or centerline shall be tied to section corners, or to monument lines or to right-of-way lines.

3. Points along the survey line shall be referenced to perpetuate the alignment. Whenever possible, the reference points shall be established at right angles to the survey line and at intervals no longer than 1,400 feet. Reference points shall be shown on construction plans.

4. Centerline of side streets shall be established and set by nail and disc. Station and angle turned shall be given and shown on the plans.

5. All curve data (horizontal) shall be shown on Plans. Point of curvature and point of tangency shall be set in the field, reference P.C. and P.T. or P.I.

6. Easement lines shall be tied to baseline or centerline. Give station and angle turned.

7. Set centerline or baseline stations every 100 feet on the ground using iron rods in unpaved areas or P.K. nails on asphalt.

8. On vertical control refer to datum used (such as NGVD 88, NGVD 1929, City of Miami). Nationwide, surveys and as-builts are in the process of conversion to NAVD 88 from the NGVD 1929. The Department will accept NAVD 88 datum with a conversion factor on each page. The Florida Department of Transportation is using the NAVD 88 datum. Projects within FDOT roadway limits shall either use NAVD 88 datum or provide a conversion factor on each page if the NGVD 1929 datum is used. For projects using City of Miami datum provide a conversion factor on each page to the NAVD 88 datum.

9. Temporary bench marks (T.B.M.) and bench marks shall be established throughout the project at approximately 1,000 feet intervals. Show information on plans

10. Centerline shall be tied to baseline if different from each other.

11. Tie proposed pipe to centerline or baseline, not to right-of-way line. Right-of-way line shall be tied to centerline or baseline.

12. All survey information shall be shown on the plans.

13. All point of intersections and deflection angles shall also be shown. Angle can be submitted by bearings.

END OF SECTION

SECTION 01070

CUTTING AND PATCHING

PART 1 GENERAL

1.01 SCOPE OF WORK

A. Work Included: This section includes work required to provide complete, in place, cutting, fitting, and patching of new and existing work.

1. Do not imperil any work by cutting or altering work or any part of it.
2. Do not cut structural or reinforcing steel without the written consent of the Engineer.

1.02 DESCRIPTION OF WORK

A. Execute cutting (including excavating), fitting or patching of work, required to:

1. Make the several parts fit properly.
2. Uncover work to provide for the installation of ill-timed work.
3. Remove samples of installed work as specified for testing.
4. Install specified work in existing construction.

B. In addition to Contract requirements, upon written instructions from the Engineer:

1. Uncover work to provide for Engineer's observation of covered work.
2. Remove samples of installed materials for testing.

1.03 SUBMITTALS DURING CONSTRUCTION

A. Prior to cutting which affects structural integrity or safety, submit written notice to the Engineer and other Contractors, requesting consent to proceed with cutting.

B. All cutting and patching, to be performed at no additional cost to the Department.

C. Should conditions of work, schedule, indicate change of materials or methods, submit written recommendation to the Engineer, including:

1. Conditions indicating change.
2. Recommendations for alternative materials and/or methods.
3. Submittals as required for substitutions.
4. Submit written notice to the Engineer, designating time work will be uncovered, to provide for observation.

PART 2 PRODUCTS

2.01 GENERAL

A. Materials for replacement of work removed shall comply with applicable sections of these specifications for type of work to be performed. Materials not specified herein

shall be replaced as specified in Sub- Section 3.03 of this Section, Restoration.

B. Provide all tools and equipment required to accomplish cutting and patching.
C. Completely remove damaged or deteriorated concrete or other material.
D. Legally dispose of all demolition debris generated by the project. The Contractor shall pay for all loading, hauling, transportation and applicable tipping fees.

PART 3 EXECUTION

3.01 INSPECTION

A. Inspect existing condition of work, including elements subject to movement or damage during cutting, patching, excavating, and backfilling.

B. After uncovering work, inspect conditions affecting installation of new products.

3.02 PERFORMANCE

A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances and finishes.

B. Execute cutting and demolition as specified below:

1. The cutting and removal of existing work necessary for modifications and installation of new work shall be made with a minimum of damage to the work that is to remain. Any damage done to existing facilities which are to remain shall be repaired at the Contractor's expense to the satisfaction of the Department.
2. When removing materials, or portions of existing structures, and when making openings in walls and partitions, the Contractor shall take all precautions and use all necessary barriers and other protective devices so as not to damage the structures beyond the limits necessary for the new work, and not to damage the structures or contents by falling or flying debris. Unless otherwise permitted, line drilling will be required in cutting existing concrete.
3. Surfaces of seals visible in the completed work shall be made to match as nearly as possible the adjacent surfaces.
4. Non-shrink grout shall be used for setting wall casting, sleeves, and leveling equipment bases. Doweling anchors into existing concrete and elsewhere as required shall be done with an approved type of epoxy material.
5. Debris created within facilities, which are to remain in service during the modification work, shall be removed daily. Operators of the Department and Contractor's employees shall not be subjected to hazardous areas, when performing their duties.
6. Follow other specific instructions for the modification work given in other sections of these specifications and as shown on the Drawings. Should these instructions conflict, the more stringent conditions shall prevail.

C. Restore work which has been cut or removed; install new products to provide completed work in accordance with the requirements of Contract Documents.

3.03 RESTORATION

A. Restore structures and surfaces damaged during the course of this Contract that are to remain in the completed work.

B. Restoration shall be done with new materials and appropriate methods as specified elsewhere in these specifications for new work of similar nature; if not specified, best recommended practice of manufacturer, or appropriate trade association.

C. Restore damaged work in such a way that there is a secure intimate bond or fastening between new and old work. Restored surfaces shall be finished to such planes, shapes, and textures that no transition between new and old work is evident in finished surfaces.

3.04 CLEANING

A. Remove from site all debris, rubbish, and extra material caused by cutting and patching.

END OF SECTION

SECTION 01340

SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Department has established a "Pre-Approved Product List" for products to be used in the construction of water and sewer facilities. The "Pre-Approved Product List" lists manufacturer's product models pre-approved by the Department which meet the minimum requirements established in the Department's design and construction standards and specifications. However, not all products that may be used in the construction of water and sewer facilities that meet the Department's design and construction standards and specifications are listed in the "Pre-Approved Product List." The "Pre-Approved Product List" is not an exclusive collection of all qualified and approved products. For those products that are not on the "Pre-Approved Product List," the Contractor shall submit shop drawings as specified herein.

B. Contractors and suppliers can submit the "Pre-Approved Product List(s)" for the products that they intend to use in the construction of the water and sewer facilities for the Project. Products listed in the "Pre-Approved Product List" do not require the submittal of shop drawings to the Department. The "Pre-Approved Product List(s)" must be stamped, reviewed and initialed by the Contractor and by his engineer, if applicable, prior to submittal to the Department. A "Submittal Summary Sheet" must accompany all "Pre-Approved Product List" submittals. Both forms can be found in the Department website at www.miamidade.gov/water/pre-approved-product-list.asp.

B. Shop Drawings (including Pre-Approved Product List submittals) shall be submitted prior to any project construction activity. In a timely fashion, well before the contemplated ordering for fabrication of special order or long-lead items or construction use of any standard element of the work, the Contractor shall furnish Shop Drawings for the review and approval of the City.

C. It is the Contractor's sole responsibility, upon the first occasion of submittal of a particular element of the work, to submit Shop Drawings of an element which match and fulfill the requirements and intent of the Plans and Specifications. Any delays or costs caused, either directly or indirectly, by non-timely submissions; submission of items differing significantly from the intent of the Plans and/or Specifications; repeated submission of, or argument over, rejected elements or changes required for acceptance; arguments with the criteria or requirements of the Plans or Specifications; or any other such similar activities shall be at the expense of the Contractor.

D. It is the intent of the Contract Documents that the Contractor shall, in the first instance, submit Shop Drawings of elements which meet or exceed the requirements of the Contract Documents and fit with the other elements of the work and the existing conditions. Delays or the inability to obtain shop drawing approval may subject the Contractor to costs for liquidated or actual damages as specified in the Contract.

E. The approval of Pre-Approved product sheets, shop drawings and data will be general and shall mean that upon examination of the drawings, no variations from the approved project drawings and project requirements have been discovered, and approval will not relieve the Contractor of his responsibilities as defined above. The Department's review will not constitute an approval of dimensions, quantities and details of the material, equipment or item shown.

1.02 CONTRACTOR SUBMITTALS

A. The Contractor shall submit a minimum of four (4) hardcopies of the shop drawing submittal package to the Water and Sewer Department Document Control Section. PDF files of the entire submittal package along with the hard copies are encouraged to simplify the approval process.

B. The Shop Drawing submittal package shall include a transmittal, submittal registry and the pre-approved product list or shop drawing sheets stamped by the Contractor.

C. The Contractor shall meet with the Department Engineer (Construction Manager) the after Project Award to begin the shop drawing submittal process and establish a schedule for submittal and approval.

D. Where there is a deviation from the Specifications, the Contractor shall note it and state the reasons why a deviation is required.

1.03 DESCRIPTION OF WORK

A. Submit to the Engineer for review and approval, Shop Drawings, test reports and data on materials, equipment, and material samples as required for the proper control of work, and as specified in the Specification sections. Shop Drawings shall be submitted for all materials and equipment to be furnished.

B. After award of the project, the Contractor may begin providing submittals for approval. Submit to the Engineer a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way expressed or implied relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the Specifications. This procedure is required in order to expedite

final review of Shop Drawings.

C. Maintain an accurate updated Shop Drawing submittal log which shall include the following items:

1. Submittal Description and Number Assigned
2. Specification Section
3. Plans Sheet Number
4. Date to Engineer
5. Date Returned to Contractor (from Engineer)
6. Status of Submittal (Approved, Approved as Noted, Rejected/Resubmit)
7. Date of Resubmittal and Return (as Applicable)
8. Date Material Release (for Fabrication)
9. Projected Date of Fabrication
10. Projected Date of Delivery to Site
11. Status of O & M Manuals Submittal

1.04 CONTRACTOR'S RESPONSIBILITY

A. Furnish the Engineer with a schedule of Shop Drawings submittals, fixing the respective dates for the submission of Shop Drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.

B. Submit to the Engineer all plans and schedules sufficiently in advance of construction requirements to provide maximum time for checking and appropriate action from the time the Engineer receive them.

C. It is the duty of the Contractor to check and approve all plans, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the Plans and data shall bear Contractor's stamp showing that they have been checked and approved. Shop Drawings submitted to the Engineer without the Contractor's stamp and approval shall be returned to the Contractor for conformance with this requirement before Engineer's review. **Shop Drawings shall indicate any deviations in the submittal from requirements of the Project Documents and the Contractor shall state the reason why a deviation is required.**

D. All submittals shall be accompanied by a submittal registry and transmittal letter containing the following information:

1. Date
2. Project Title and Number
3. Contractor's name and address
4. The number of each Shop Drawing, Data, and Sample submitted
5. Notification of Deviations from Project Documents
6. Submittal Log Number conforming to and referring to Specification Section

Numbers

E. Submit seven copies of Shop Drawings and of descriptive or product data submittals necessary to complement Shop Drawing. The Engineer will retain five sets.

F. After receiving approval by the Engineer, the Contractor shall be responsible for submitting the Shop Drawings to the Building Department. Shop Drawings of all premanufactured items and all other Shop Drawings are required to obtain approval prior to manufacturing or installing the submitted items. The Contractor shall also be responsible for contesting any interpretations by the Building Department that the City considers non-acceptable. The Contractor shall include in the bid prices, all costs for permits, fees and expenses associated with the submittals, including resubmittals (if any) of Shop Drawings to the Building Department. The Building Department as used in this paragraph shall be taken to mean the Miami-Dade County Building Department and/or other governing building authority appropriate to this project.

G. Do not begin any of the work covered by a drawing, data, or a sample returned as “Rejected/Resubmit” until a revision or correction thereof has been reviewed and returned to the Contractor, by the Engineer, with approval or approval “As Noted”. Be responsible for and bear all costs of damages which may result from the ordering of any material or from proceeding with any part of work prior to receiving Engineer's approval or approval “As Noted” of the necessary Shop Drawings.

H. Be fully responsible for observing the need for and for making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the materials/equipment the Contractor proposes to supply, both as they pertain to the Contractor’s own work, work of others, or of other Divisions herein or Trades and clearly show such changes on the Shop Drawings.

I. When substitutions in materials or equipment are allowed, the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense. Said engineering design services shall be of an extent satisfactory to the Engineer whose word shall be final and shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.

J. When substitutions in materials or equipment are allowed, the Contractor shall be solely responsible for all costs and time required by any differences in construction methods, fabrication or assembly required and no additional time will be allowed.

K. When a construction change, initiated by the Contractor or resulting from a change made by the Contractor, requires re-permitting as discussed in the preceding paragraph, the Contractor shall be responsible for all labor, material and equipment required to redraw the Plan sheet or sheets affected by the change to the satisfac-

tion of the Engineer of Record and the City. The costs for all work of this sort and all costs of re-permitting shall be borne by the Contractor and no extra com-pensation will be allowed.

L. Determine and verify:

1. Field measurements
2. Field construction criteria
3. Catalog numbers and similar data
4. Conformance with specifications
5. That installation and maintenance clearances are sufficient particularly when equipment or arrangement changes have been made

1.05 ENGINEER'S REVIEW OF SHOP DRAWINGS

A. Engineer's review of plans, data and samples, submitted by the Contractor will cover only general conformity to the Drawing and Specifications. The Engineer's review will not constitute an approval of dimensions, quantities, and details of the material, equipment, device, or item shown. The review of plans and schedules will be general, and shall not be construed:

1. As permitting any departure from the Contract requirements
2. As relieving the Contractor of responsibility for any errors, including detail, dimensions, and materials
3. As approving departures from details furnished by the Engineer, except as otherwise provided herein

B. Variations

1. If the plans or schedules, as submitted, describe variations per paragraph 1.03 C, and show a departure from the Contract requirements which Engineer finds to be in the interest of the City and to be so minor as not to involve a change in Contract price or time for performance, the Engineer may return the reviewed plans without noting an exception.
2. If the plans or schedules, as submitted, describe variations and show a departure from the Contract requirements which the Engineer finds to be minor enough to be corrected by redlining the submittal, the engineer will mark and return the submittal marked "Approved as Noted." The redlined corrections shall be as binding on the Contractor as would be a resubmission embodying the same corrections.

C. When reviewed by the Engineer, each of the Shop Drawings shall be stamped and dated to indicate it had been reviewed. Shop Drawings stamped "Revise and Resubmit" and with required corrections shown will be returned to the Contractor for correction and resubmittal.

D. Resubmittals will be handled in the same manner as first submittals. On resubmit-

tals the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions and corrections required by the Engineer on previous submissions. The Contractor shall make any corrections required by the Engineer.

E. If the Contractor considers any correction indicated on the Shop Drawings to constitute a change to the Project Plans or Specifications, the Contractor shall give written notice thereof to the Engineer who will render a decision which shall be final. After the decision has been made, the Contractor shall without delay, provide the corrections to the plans.

F. When the Shop Drawings have been approved by the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

G. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor for resubmittal. Unless otherwise specifically permitted by the Engineer, all submittals shall be made in groups containing all associated items for systems, processes or as indicated in specific specifications sections. All plans, schematics, manufacturer's product data, certifications and other Shop Drawing submittals required by a system specification shall be submitted at one time as a package to facilitate interface checking.

1.06 SHOP DRAWINGS

A. When used in the Project Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for materials and equipment which become an integral part of the Project. These Shop Drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance/test data shall be considered only as supportive to required Shop Drawings as defined above.

B. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked to identify pertinent materials, product or models. Information which is not applicable to the Work shall be deleted by striking or cross hatching.

C. Shop Drawing shall have a submittal registry and display the following:

1. Project Title and Number
2. Name of Project Building or Structure
3. Number and Title of the Shop Drawing
4. Date of Shop Drawing or Revision
5. Name of Contractor and Subcontractor Submitting Drawing
6. Supplier/Manufacturer
7. Separate Detailer when Pertinent

8. Specification Title and Number
9. Specification Section
10. Application Project Drawing Number

D. If plans show variations from Contract requirements because of standard shop practice or for other reasons, describe such variations in the letter of transmittal. If no explanation of these variations is provided, the Contractor shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such plans have been reviewed and approved.

E. For all mechanical and electrical equipment furnished, provide a list including the equipment name, address of and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.

F. All manufacturers or equipment suppliers who propose to furnish equipment or products shall submit an installation list to the Engineer along with the required Shop Drawings. The installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least five years, unless otherwise specified. Manufacturers and/or equipment which fails to meet the specified experience period will be considered if the manufacturer or supplier provides a bond or cash deposit which will guarantee replacement of the equipment or process in the event of failure or unsatisfactory service.

G. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.

1.07 REQUIRED INFORMATION

A. Submit, as applicable, the following for all prefabricated or manufactured structural, mechanical, electrical, plumbing, process system, and equipment work:

1. Shop Drawings or equipment drawings, including dimensions, size and location of connections to other work, and weight of equipment
2. Catalog information and cuts
3. Installation or placing plans for equipment, drives, and bases
4. Supporting calculations, signed and sealed by a Florida Registered Engineer when required, for equipment and associated supports, or hangers required or specified to be designed by equipment manufacturers
5. Signed and sealed calculations and plans by in-house Florida Registered Professional Engineer for structural systems, indicating compliance to the structural design criteria specified in the Plans
6. Complete manufacturer's specifications, including materials description and paint system
7. Performance data and pump curves
8. Suggested spare parts with current price information
9. List of special tools required for testing, checking, parts replacement, and maintenance. (Special tools are those which have been specially designed

or adapted for use on parts of the equipment, and are not customarily and routinely carried by maintenance mechanics)

10. List of special tools furnished with the equipment
11. List of materials and supplies required for the equipment prior to, and during startup
12. List of materials or supplies furnished with the equipment
13. Special handling instructions
14. Requirements for storage and protection prior to installation
15. Requirements for routine maintenance required prior to equipment startup
16. List of all requested exceptions to the Project Documents

1.08 SUBMITTAL REQUIRED FOR FOREIGN MANUFACTURED ITEMS

A. In addition to the submittal requirements stated above, suppliers of foreign manufactured items shall submit the names and addresses of companies within the United States that maintain technical service representatives and a complete inventory of spare parts and accessories for each foreign-made item proposed for incorporation into the Work. Failure to prove these capabilities shall be cause for rejection of the foreign manufactured items.

B. Foreign manufactured equipment and materials shall in all cases be clearly and permanently marked with the manufacturer's name and country of origin of the item. The name of the U.S. importing/supplying firm is not acceptable. Shop Drawing submittals of foreign-made items shall be accompanied by written information to include name and location (i.e. country, City, and street address) of the manufacturer. This requirement shall also apply to the foreign made elements of items assembled in this country from parts wholly or partially manufactured overseas.

1. The words, "Permanently Marked" as used in this paragraph shall mean; die stamped, cast-in, welded, or otherwise marked such that the removal of the marking by any mechanical or chemical means will result in obvious permanent damage to the surface marked. These markings shall be on surfaces which are not hidden by assembly.

C. Where specified elsewhere herein or at the sole discretion of the Engineer, whose word shall be final, supply verification of quality, suitability or other aspects, as directed by the Engineer, from a Professional Engineer licensed to practice in the State of Florida or the state where the supplying U.S. firm is located. The verification shall be signed, sealed, and dated. All costs for this verification shall be at the sole expense of the Contractor and no extra compensation will be allowed. Verification by foreign-based engineers, firms, manufacturers, etc. will not be acceptable. Verification by means of a very stringent foreign testing agency/standard (for example ISO 9000 series) may be acceptable. However, this shall again be at the sole discretion of the Engineer and the full burden of proof and satisfaction of the City shall rest with the Contractor. No extra time will be permitted due to the requirement for verification and the Contractor has the sole responsibility to make

his submittals with all necessary information in a timely fashion.

1.09 SAMPLES

A. Furnish for the approval of the Engineer, samples required by the Project Documents or required by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until approved by the Engineer.

B. Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices
2. Full range of color, texture and pattern
3. A minimum of two samples of each Item shall be submitted

C. Each sample shall have a label indicating:

1. Name of Project
2. Material or Equipment Represented
3. Name of Producer and Brand (if any)
4. Location in Project

D. Prepare a transmittal letter in triplicate for each shipment of samples containing the information specified herein in Paragraph 1.06 A. Enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use specified and shall not be construed to change or modify any Contract requirements.

E. Approved samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the approved samples. Samples which failed testing or were not approved shall be returned to the Contractor at his expense, if so requested at time of submission.

1.10 SUBSTITUTIONS

A. Changes in products, materials, equipment, and methods of construction required by the Contract Documents, which are proposed by the Contractor after award of the Contract, are considered to be requests for substitutions. Where the Plans and/or Specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use. Articles or products of similar characteristics may be offered for the approval of the Engineer, whose decision shall be final. Copies of complete descriptive data shall be fur-

nished regarding all materials furnished by the Contractor, consisting of Dimension drawings, catalog references, product data, cost, and other information necessary to clearly identify and evaluate each article. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent, connected, or other structures and equipment at his expense.

B. Where engineer-recommended changes, substitutions or appurtenant work require engineering design, the Contractor shall have such design services performed. Those engineering design services shall be of an extent satisfactory to the Engineer, whose decision shall be final. Engineering services for engineer-recommended changes, substitutions or appurtenant work, shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.

C Unless specifically authorized by the Engineer in writing, no additional contract time will be allowed, and a decrease in time may be appropriate.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01410

TESTING AND TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The City will employ and pay for services of an independent testing laboratory to perform testing as indicated in the Project Documents, and may at any time elect to have materials and equipment tested for conformance with the Project Documents.

B. Cooperate with the laboratory to facilitate the execution of its required services.

C. Testing laboratory inspection, sampling and testing will be required for, but not limited to, the following:

1. Soil Compaction
2. Cast-in-Place Concrete
3. Mechanical Work

1.02 CONTRACTOR'S RESPONSIBILITIES

A. Cooperate with laboratory personnel and provide access to Work.

B. Make available, at no cost to the City, adequate quantities of representative samples of materials proposed to be used and which require testing.

C. Provide to the laboratory the preliminary design mix approved to be used for concrete, and other materials mixes, which require control by the testing laboratory.

D. Furnish incidental labor and facilities:

1. To provide access to work to be tested
2. To obtain and handle samples at the Project site or at the source of the product to be tested
3. To facilitate inspections and tests
4. For storage and curing of test samples

E. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

1.03 PAYMENT FOR TESTING

A. The City will pay for initial testing services required elsewhere in these Specifications.

B. When initial tests indicate non-compliance with the Project Documents, subsequent retesting occasioned by the non-compliance shall be performed by the same Testing Laboratory, and all costs thereof shall be paid for by the Contractor.

C. Inspecting and testing, performed exclusively for the Contractor's convenience, shall be the sole responsibility of and shall be paid for by the Contractor.

1.04 QUALITY ASSURANCE

A. Upon completion of each test and/or inspection, promptly distribute copies of test or inspection reports to the Engineer, the Contractor, to governmental agencies requiring submission of such reports, and to other persons as directed by the Engineer.

PART 2 PRODUCTS

2.01 TEST METHODS

A. Tests and Inspections will be conducted in accordance with the requirements of these specifications or, if not herein specified, in accordance with the latest standards of the American Society for Testing and Materials (ASTM), or other approved and recognized authorities as acceptable to the City.

B. Requirements for testing are described in various Sections of these Specifications.

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01710

CLEANING

PART 1 GENERAL

1.01 SCOPE OF WORK

A. This Section specifies the maintenance of the work site in a clean, orderly, hazard-free condition.

1.02 QUALITY ASSURANCE

A. Conduct cleaning and disposal operations in accordance with local ordinances and anti-pollution laws. Rubbish, volatile wastes, and other construction wastes shall be neither burned nor buried on the work site, and shall not be disposed of into storm drains, sanitary drains, streams or other waterways.

B. Final cleaning shall be accomplished either by workmen experienced in cleaning operations or by professional cleaners.

1.03 DISPOSAL REQUIREMENTS

A. Conduct cleaning and disposal operations to comply with local codes, ordinances, regulations, and anti-pollution laws. Do not burn or bury rubbish or waste materials on Project site. Do not dispose of volatile wastes, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains, Volatile wastes shall be disposed in accordance with proper laws and be approved by the Department. Do not dispose of wastes into streams or waterways.

PART 2 PRODUCTS

2.01 ON-SITE WASTE CONTAINERS

A. Provide on-site waste containers for collection of waste materials, debris and rubbish. See Section 01100 - Special Project Procedures, Subsection 1.05 regarding Safety Requirements for environmentally hazardous materials.

2.02 CLEANING MATERIALS

A. Cleaning materials shall be as recommended by the manufacturer of the surface to be cleaned.

PART 3 EXECUTION

3.01 SAFETY REQUIREMENTS

A. Maintain work site in accordance with local ordinances and anti-pollution laws

applicable to work site cleanliness and in a neat, orderly and hazard-free condition until final acceptance of the work. Catwalks, accessible underground structures, work site sidewalks and walkways adjacent to the work site shall be kept free from hazards caused by construction activities.

B. Store volatile wastes including rags in covered metal containers, and remove from work site daily.

C. Prevent accumulations of wastes which create hazardous conditions.

D. Artificially ventilate spaces which are not naturally ventilated when volatile or noxious substances are present in those spaces.

3.02 CLEANING DURING CONSTRUCTION

A. Perform cleaning every workday for duration of the Work. Structures, grounds, and areas of the work site, access roads and adjacent public and private properties shall be maintained free from accumulations of waste materials and rubbish caused by construction operations on the work site. Place waste materials and rubbish in on site containers or as otherwise approved. Unneeded construction equipment shall be removed and all damaged repaired so that the public and property owners will be inconvenienced as little as possible.

B. Remove or secure loose material on open decks and on other exposed surfaces at end of each day's work or more often to maintain work site in hazard-free condition.

C. Prevent dislodgement of materials due to wind and other forces. Wet down dry materials and rubbish to lay dust and prevent blowing dust. Cover or wet excavated material leaving and arriving at the site to prevent blowing dust. Clean the public access roads to the site of any material falling from the haul trucks.

D. Empty on-site waste containers whenever necessary so that trash overflow does not occur. Legally dispose of contents at either public or private dumping areas.

E. Control the handling of materials, debris and rubbish; do not drop or throw from heights.

F. Immediately remove spillages of construction-related materials from hauling routes or the site.

G. Where material or debris has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes, structures, or elsewhere during the course of the Contractor’s operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc., shall, upon completion of the work, be left in a clean and neat condition.

3.03 FINAL CLEANING

A. In addition to the cleaning performed above, in preparation for final inspection, remove grease, dust, dirt, rust stain from surfaces. Remove labels, fingerprints and other foreign materials from exposed exterior finished surfaces. Flush down all manhole covers and frames, valve boxes, and areas leaving such surfaces clean of all sand, laitances, etc.

B. In preparation for final acceptance or occupancy, conduct final inspection and cleaning of exposed exterior surfaces, and of concealed spaces.

C. Maintain cleaning operations until project has been finally accepted.

END OF SECTION

SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 DESCRIPTION

A. Scope of Work: For contracts where the work is performed at an on-site location maintain one record copy of:

1. Record Drawings. Record Drawings as used herein shall mean a drawing that accurately records constructed improvements and any field changes.
2. Record Specifications.
3. Addenda.
4. Change Orders and other modification of the contract.
5. Engineer's written orders or instructions.
6. Approved Shop Drawings, Product Data and Samples.
7. Field Test records.
8. Construction photographs.
9. As built dimensions and elevations as recorded by the Contractor's Florida Licensed Professional Surveyor and Mapper (PSM) on a daily basis.
10. Field Book. Survey Field notes taken by the Florida Licensed Professional Surveyor and Mapper’s survey crew (copy provided to the Engineer on a monthly basis).

B. The records listed above are to be made available to the Engineer at all times for all projects.

C. Related Requirements Described Elsewhere:

1. Section 01340: Shop Drawings, Product Data and Samples.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Maintain documents in a clean dry, legible, condition and in good order. Do not use record documents for construction purposes.

1.03 REQUIRED MEASUREMENTS

A. Set-up and Verification: The Contractor’s Florida Licensed Professional Surveyor and Mapper is required to recover the design baseline and verify the elevations and coordinates on a regular basis as needed.

B. The Contractor is required to have a level instrument setup next to the construction site in order to control the vertical alignment of the pipe installation

prior to trench backfilling. The level shall be setup daily for use by the surveyor, Contractor's foreman and Department Engineer/Inspector. Any underground construction work that does not have a level properly setup will be stopped by the Department Engineer/Inspector.

C. The Contractor is required to have a survey crew record the field information on a daily basis when there is underground pipe installation. The survey crew shall be on-site as needed to record and verify the information before it is covered. Any underground construction work that does not have the information recorded by a survey crew will be stopped by the Department Engineer/Inspector. The Engineer/Inspector has the authority to order re-excavation of work that was covered without accurate survey measurements.

D. Field Book Information: The Florida Licensed Professional Surveyor and Mapper is required to have his crews make daily visits to the project site during underground pipe installation work to perform field measurements of the Contractor's daily installations. This information shall be recorded in field books. Copies of the field notes are required to be provided to the Construction Manager on a monthly basis. The surveyor's field notes of the surveyor shall be submitted to the Department along with partial as-builts plans (signed and sealed) on a monthly basis as a condition of payment.

1.04 PROJECT RECORDS

A. During the life of the Contract the Contractor shall retain the services of a Florida Licensed Professional Surveyor and Mapper (PSM) who shall maintain daily records of the installation, including all deviations from Plans and Specifications and for the purposes of preparing and submitting to the Department an as-built/record survey in compliance with:

1) Florida Statutes Chapter 472.027.

2) Florida Administrative Code Chapter 5J-17.050, 5J-17.051 and 5J-17.052

3) As further required by these Contract Documents.

B. The Measure and Recording of all information required in Subsection A above for all projects concurrently with construction progress. The services of the Florida Licensed Professional Surveyor and Mapper for the project shall be retained by the Contractor prior to the issuance of the Notice to Proceed. A letter from the Florida Licensed Professional Surveyor and Mapper shall be provided at the preconstruction meeting indicating that the Contractor has secured his services to perform all survey work for the duration of the project and prepare final as-builts plans.

C. Submit redlines, partially completed as-built plan sheets and fully complete as-built Plan sheets and certified copies of field book information to include raw data of the measurements all as required by and satisfactory to, the Engineer as

prerequisite for the acceptance of monthly payment applications.

D. Label each document "PROJECT RECORD" in neat large printed letters.

1. Record all information for pipeline projects and on-site projects concurrently with construction progress.

2. Do not conceal any work until as-built information is recorded by the Contractor's surveyor.
3. All locations for future connections or tie-ins shall be left unburied and uncovered until the Contractor's PSM measures and records the as-built information.

    a. All as-built and inspector information is to be made available to the Engineer on a daily basis for inclusion in the M-D WASD records.

4. Restrained pipe, end line valves, thrust blocks shall be left uncovered for the last complete length. Inline valves and tees shall be left exposed for 1 length on both sides plus the face end. Measure and record the elevation, horizontal and vertical alignment, and the inclination for these items.
5. For all projects, the Contractor's PSM shall maintain exact and extensive records of any deviations from Drawings and Specifications. These records shall be satisfactory to the Engineer, whose decision shall be final, and sufficient to allow the production of accurate as built Plans which correctly and completely portray the work as constructed.

6. For all projects, the Contractor's PSM shall record data as follows during the entirety of construction.

    a. For facility (e.g. a water or sewage plant, pumping station, or similar site, if so designated by M-D WASD) projects, record as-built dimensions and elevations every twenty-five feet (25') or portion thereof along pipeline and at every abrupt change in direction of the new line.
    b. For pipeline projects, constructed in the public right-of-way, record dimensions and elevations every one hundred feet or portion thereof along the pipeline and at every horizontal and vertical change in direction.
    c. In all cases, record locations and elevations for each valve, fitting, service line, fire hydrant, water sampling point, utility poles adjacent to the proposed line, overhead wires crossing the ditch line (approximate height above grade) and other appurtenances along the pipeline.
    d. The identity, dimensions, location, and elevation of any existing utility crossing the proposed line and so immediately adjacent to the new line as to be exposed by the excavation, shall also be

recorded. Locate, excavate, expose, and record the same data for any utility shown in the plans whose proximity to the proposed pipeline could affect the certification requirements of the new installation. Note that in instances of a very wide ditch due to ground conditions, the recording of data for adjacent, paralleling utilities shall only be required for lines which come within three feet of the outside of the pipe being installed, unless otherwise ordered by the Engineer who's decision shall be final.

e. Without exception, for all thrust blocks, the top elevation, outer dimension, thickness of the block, length and location of any sheet piling, if used, shall be recorded by the Contractor's PSM.

f. Specific locations and elevation of equipment, the buildings and miscellaneous items installed inside them shall be recorded as applicable and as required by the Engineer.

g. Without exception, where the substitution of another piece of equipment for that shown on the Plans has been allowed, the footprint, clearance, and elevation dimensions shall be recorded by the Contractor's PSM and these changes shall be accurately and thoroughly portrayed on the as-built plans.

h. Contractor's Licensed Surveyor shall prepare from the field data, as-built record drawings showing correctly, completely, and accurately the installation, embracing all changes and deviations made during construction, including all construction variances, to reflect the work as it was constructed.

i. Record Drawings shall be prepared as specified hereinafter.

j. Record Drawings and five (5) copies shall be signed and sealed by the Surveyor and shall be submitted to the Department for the Engineer's review within ten (10) calendar days following the completion date of successful pressure testing of all mains and appurtenances under this Contract.

k. If the Engineer determines that the Drawings are not acceptable, they will be returned to the Contractor with a cover letter noting the deficiencies and/or reasons for the disapproval. Contractor shall have ten (10) calendar days to correct all exceptions taken by the Engineer and resubmit as-built record drawings to the Engineer for final acceptance.

1.05 MECHANICAL, STRUCTURAL AND ELECTRICAL AS-BUILT RECORDS

A. The mechanical, structural and electrical information on as-builts for Pump Stations and Plant work shall be reviewed and signed and sealed by a Florida Registered Professional Engineer when designated as the responsible party for the corresponding portion of the as-builts.

B. The Engineer shall verify that all mechanical, structural and electrical information on the as-built the work was constructed as designed on the Design Plans. Any deviation shall be noted and approved by the Department.

C. Capital Improvement Projects contracted by the Department shall be certified by

the Construction Manager or Engineer of Record that the work was constructed as designed on the Design Plans with any deviation shall be noted and approved by the Department.

1.06 PROPERTY BOUNDARIES

A. The Florida Licensed Professional Surveyor and Mapper shall establish and maintain throughout the construction the property boundaries of pump stations and easements. The surveyor shall verify that the work of the project does not encroach into adjacent (abutting) property. Property corners lost during construction shall be reset at the first opportunity to ensure that the work is done within the designated limits.

B. The as-builts for pump stations or other Water and Sewer Department above ground facilities in an easement or designated property shall show all property corners, setbacks and dimensions of the structure and appurtenances. All information required of a boundary survey shall be contained on the as-built plans. A boundary survey signed and sealed by a PSM shall be a part of the as-built plans.

1.07 DRAWINGS

A. During the life of the Contract, maintain records of all deviations from the Plans and Specifications and prepare therefrom As-Built Record Drawings showing correctly and accurately all changes and deviations made during construction to reflect the work as it was actually constructed. It is the responsibility of the Contractor to check the As-Built Record Drawings for errors and omissions prior to submittal to the Department and certify in writing that the As-Built Record Drawings are correct and accurate, including the actual location of all piping, exposed and internal piping, and electrical/signal conduits in or below the concrete floor. Indicate the size, depth and voltage in each conduit.

B. Legibly Mark To Record Actual Construction: All data as previously specified for all installations by the Contractor’s PSM. For on-site structures and facilities work the Contractor’s Florida Registered Land Surveyor shall record:

1. Depths of various elements of foundation in relation to finish first floor and datum plane.
2. All exposed and underground piping and ductwork with elevations and dimensions and locations of valves, pull boxes, etc. Changes in location. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent reference points, plant survey grids, property lines and similar.
3. Location of internal utilities and appurtenances concealed in the construction shall be referenced to visible and accessible features of the structure. Air conditioning ducts with locations of dampers, access doors, fans and other items needing periodic maintenance.
4. Field changes in dimensions and details.
5. Changes made by Engineer's written instructions or by Change Order.

6. Details not on original Contract Drawings.
7. Equipment and piping relocations.
8. Major architectural and structural changes in structures, including tanks.
9. Architectural schedule changes according to Contractor's record and shop drawings.
10. Record Drawings shall be prepared as specified hereinafter.

C. Specifications and Addenda: Legibly mark each section to record:

1. Manufacturer, trade name, catalog number and Supplier of each product and item of equipment actually installed.
2. Changes made by Engineer's written instructions or by Change Order.

D. Approved Shop Drawings: Provide record copies for system diagrams and drawings together with each element of process equipment, piping, electrical system and instrumentation system.

1.08 SUBMITTALS

A. Accompany submittal with transmittal letter in duplicate, containing:

1. Date
2. Project title and number
3. Contractor's name and address
4. Title and number of each Record Document
5. Signature of Contractor or his authorized representative.

B. Record Drawings with five copies which have been signed and sealed by the surveyor shall be submitted to the M-D WASD for the engineer’s review. Drawings shall conform to recognized drafting standards. As-built drawing shall be submitted on 24-inch by 36-inch bond paper. These materials shall be submitted to the MD-WASD for the Engineer’s review as a prerequisite for payment during the course of construction as previously specified and final, complete sets of documents within ten calendar days following the completion date of successful testing of all mains, equipment and appurtenances under this Contract. Final payment will not be made until the five sets of as-built record drawings (with AutoCAD file) and five sets of prints have been approved and accepted by the Engineer.

1. In cases where a portion of a pipeline system or parts of a process system are put into service, the above conditions shall apply for the in-service portion and monthly payments shall be withheld until the as-built drawings are accepted by the Engineer.
2. As-Built Record Drawings, as prepared by the Contractor’s Florida Licensed Professional Surveyor and Mapper and submitted by the Contractor, shall comply with following criteria and standards:
   a. Title block must show the Contract or Project Title (as applicable); Contract number; MD-WASD ER, PCTS, RPQ numbers; Contractor’s name; Engineer of Record’s name;

Surveyor's name and address; date; location; and where appropriate to the work, size and type (i.e. water main, sanitary gravity main, sanitary force main) of main.

b. Baselines or centerlines must be tied to section corners, monument line and right-of-way lines.

c. Pipeline must be tied to baseline or centerline with stations and offsets.

d. Baselines or centerlines must show bearings or deflection angles, or delta, radius, chord and arc length for curves.

e. Show all horizontal curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

f. Stationing must be the same as shown on construction drawings and must be tied to Section corners, centerline intersections and all other pertinent control points within the Project. All such pertinent points shall have their stationing shown and where there is dual stationing for a point, both stations shall be called out.

g. Indentify all streets by name or number and show stationing at all intersecting streets.

h. Refer to vertical datum plane and identify the location, elevation and source supplying the bench mark used.

i. Tie easement lines to survey baseline or platted centerline and right-of-ways.

j. Show horizontal and vertical locations of all fittings, deflections, or at any significant change of direction, and at a maximum of 100-foot intervals along the pipeline for off-site (e.g. in the public right-of-way) and at maximum 25- foot intervals for on-site (e.g. on a facility such as a pump station or plant work.

k. On all pipe fittings of 36-inch diameter or over, (i.e. tees bends, crosses, wyes, increasers/decreasers, bevels) elevations must be taken at the end and center points to reflect the true elevation and altitude of the fitting.

l. Elevations of natural ground or pavement over the pipeline must be shown at each position where the pipe elevation is shown and at intervening high and low points.

m. Manhole rim and valve box rim elevations must be shown.

n. Show all invert and bottom elevations in manholes and valve vaults or boxes. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the pipe line being constructed.

o. Locations and elevations together with diameter, thickness and material of all casings.

p. Location, top and bottom elevations of all sheeting left in place.

q. Coordinate values used inside plants shall be the local, the City established coordinate systems referenced to the property boundary.

r. State plane coordinate values for all new valves and manholes; on existing valves and manholes at points of connection or closest to the point of connection and the point of connection

itself.

3. Certification: The Contractor shall certify on as-built record drawings all other actual constructed details and information as may be required by the City including but not limited to:

   a. Pipeline must be identified by type of pipe material, manufacturer, type of joint and type of joint restraint.
   b. Valves shall be identified by size, type, end condition; and n valves 16-inch or larger, the manufacturer's name and number of turns required to open or close the valve.
   c. Show calculated pipeline percent of grade between manholes of gravity systems.
   d. Types and sizes of sheeting and piling together with measured and complete; location, dimensional, , and elevation data on any pile caps, tie backs, anchors, whalers or other appurtenant structures left in place.

C. Digital Records: The City requires the submittal of as-built drawings in AutoCAD for Windows format and in PDF format. Graphical information contained on magnetic media shall be the same as provided on plan sheets. Digital Records shall be delivered to the City Project Manager containing a list of all files and data being provided. The AutoCAD file shall be compatible with the Department system and capable of being uploaded without external reference files.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 78 40 (01725)

PROJECT AS-BUILT/RECORD DRAWINGS

PART 1 GENERAL

1.01 SCOPE

A. This Section shall serve to set requirements for As-Built/Record Drawings submitted to Miami-Dade Water and Sewer Department (Department").

B. As-Built/Record Drawings shall be submitted prior to placing any mains in service. The approved Final As-Built/Record Drawings are required for Substantial Completion and Conveyance of new water or sewer infrastructure. The infrastructure shall have As-Built/Record Drawings in the format and information specified herein, as recorded by a Professional Surveyor and Mapper (PSM) and prepared in accordance with these guidelines as part of the construction and inspection process.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. The work shall proceed in accordance with the following specification sections, bound herein:

1. Section 01 31 19.13 (01150) – “Preconstruction Conference”
2. Section 01 42 16 (01005) – “Defined Terms”
3. Section 01 71 23 (01031) – “Grades, Lines and Levels”
4. Section 01 77 00 (01700) – “Contract Closeout”

1.03 GENERAL

A. The Contractor shall retain the services of a Florida Registered Professional Surveyor and Mapper as a prerequisite to receiving a Notice To Proceed (NTP).

1. Prior to receiving the NTP the Contractor shall provide a letter from the PSM indicating that the Contractor has secured his services to perform all survey work for the duration of the Project, and to prepare final As-built/Record Drawings.
2. Prior to receiving the NTP the Contractor shall provide a copy of the insurance policy declaration page of the surveying company, and the professional Liability insurance coverage.
3. The Surveyor shall attend the Preconstruction Conference. It is the Contractor’s responsibility to have the services of the PSM by the Preconstruction Conference and the PSM in attendance.
4. Donation projects require the Survey Company or PSM to carry professional liability insurance coverage. A copy of the insurance policy including the declaration page shall be provided with the Final As-Built/Record Drawings.

B. The Florida Registered PSM shall maintain records of the installation, including all deviations from Plans and Specifications, and for the purposes of preparing and submitting to the Department an As-Built/Record Drawing in compliance with:

1. Florida Statutes Chapter 472.027.
2. Florida Administrative Code Chapter 5J-17.
3. As further required by the Contract Documents.

1.04 AS-BUILT SUBMITTAL PACKAGE

A. The Final As-Built/Record Drawing shall be submitted by the Contractor prior to performing the pressure test of the main to be placed into service. The Department is required to have as-built record documentation of all mains in operation.

B. Donation Projects As-Built Package-Submittal Prior To Pressure Testing and Certification

1. A set of signed and sealed As-Built/Record Drawings (DWFX or PDF file), signed and sealed field book information, electronic field raw data shall be submitted using the applicable Department's system.
2. As-Built/Record Drawings in digital format DWG.
3. Bill of Materials, Bill of Sale Sketch (completed and signed by the Contractor).
4. Easement(s) legal description and sketch (signed by the owner if part of the project). All surveys for right-of-ways, easements, properties, topographical, boundaries and other special purposes.

C. Monthly submittals (for WASD contract projects)

1. A set of signed and sealed As-Built/Record Drawings (DWFX or PDF file), signed and sealed field book information, electronic field raw data shall be submitted using the applicable Department's system.
2. As-Built/Record Drawings in digital format DWG.
3. Final As-Built/Record Drawings shall be submitted as a prerequisite for the last progress payment.
4. Easement(s) legal description and sketch (signed by the owner if part of the project). All surveys for right-of-ways, easements, properties, topographical, boundaries and other special purposes.

D. **Final submittal** shall consist of corrected As-Built/Record Drawings and Documents in digital format (DWG and PDF files), to be submitted using the applicable Department's system and the following sets of signed and sealed hard copies:

1. Two sets for water main projects,
2. Two sets for gravity and force main sewer projects,
3. For pump stations:
    a. Five sets for donation projects.

b. Three sets for contracts.

4. PSM's signed and sealed copy of the Field Book.

5. For donations, a copy of the insurance policy of the PSM, and the surveying company, including the declaration page.

E. As-Built/Record Drawings signed and sealed by the Florida Registered Professional Surveyor and Mapper and/or Engineer of Record or designated Florida Registered Professional Engineer must comply with format requirements.

F. Platted Lots Requirement

1. In lieu of recorded plats, 1 copy of a tentative plat signed by a representative of the Miami-Dade County, Department of Transportation and Public Works, Plats Division may be acceptable for As-Built/Record purposes. The Plats Division representative shall attest that the lot and block numbers, street names, easements, and other pertinent data shown are as will be recorded in the plat's final form. In this case, the submitter is responsible to provide a copy of the recorded plat to the Department's New Business office before any water meters are set on the Project.

1.05 AS-BUILT/RECORD DRAWINGS FORMAT AND GENERAL SUBMITTAL REQUIREMENTS

A. Size shall be 24" X 36".

1. Preferred scales are 1"=20' for contracts and 1"=40' for donations horizontally, and 1"=2' for contracts and 1"=4' for donations vertically. Other scales may be permitted but must be approved by the Department prior to preparation of the drawings.

2. Provide separate As-Built/Record Drawings and easements for water and sewer conveyances. Where water and sewer are shown on the sewer As-Built/Record Drawings, print dash the water on the sewer As-Built/Record Drawings and show only sewer As-Built information. The same applies for the water As-Built/Record Drawings.

3. Any deviations from the design plans must be approved by the Department.

B. Quality of As-Built/Record Drawings

1. To ensure that As-Built/Record Drawings may serve their intended purposes, they shall be prepared with consideration for quality. The Inspector and As-Built Reviewer will consider the following elements to ensure the quality of As-Built/Record Drawings:

a. Accuracy: The Contractor is required to have a survey crew record the field information as necessary when there is underground pipe installation. The Florida Registered Professional Surveyor and Mapper shall be responsible for providing measurements in accordance with the standard of practice established in Chapter 5J-17 of the Florida Administrative Code, pursuant to Section 427.027, Florida Statutes. The approved final As-Built/Record Drawing will be used as part of the Department's GIS and Record System. In addition, the horizontal

accuracy shall not exceed 1 foot in 7,500 feet, a commonly value accepted for suburban areas. The elevations shall be based on a closed level between two-benchmarks and shall not exceed the calculated value of a closure in feet of plus or minus 0.05 feet times the square root of the distance in miles.

b. Appearance: As-Built/Record Drawing shall be prepared in a professional manner consistent with common drafting standards for layout, lettering and line work.

c. Understandability: As-Built information shall be portrayed in a manner that is readily understandable by someone not familiar with the specific job.

d. Clarity: Preparer shall endeavor to present As-Built information clearly without "cluttering" the drawing. Do not include or show trees, shrubs, traffic lights or signs, landscaping, etc.

1.06 CERTIFICATION

A. As-Built/Record Drawings shall include a signed, sealed and dated certification statement by the responsible Florida Registered Professional Surveyor and Mapper, that all measurements were recorded under his direction and that they are accurate.

B. Final As-Built/Record Drawings that contain electrical, mechanical or structural work (pump stations, sewage flow meters, etc.), shall be signed and sealed by the Engineer of Record to indicate As-Built conditions.

C. Certifier shall be fully responsible for the accuracy of the As-Built/Record Drawings. As-Built/Record Drawings shall not contain any statement that the information was obtained from another party other than a Professional Surveyor and Mapper under his direction (e.g. a statement such as "As-Built information provided by Contractor" shall not be permitted).

D. The Contractor shall certify on the As-Built/Record Drawings that the As-Built/Record Drawings are correct and accurately depict what was constructed in the field, in addition that all As-Built field information submitted to the EOR or designated Florida Registered Professional Engineer and/or PSM reflects actual field As-Built project conditions, such as:

1. Valves must be identified by size, type, and end condition. On valves 16-inch or larger, the manufacturer’s name and number of turns required to open or close the valve.

2. Pipeline must be identified by type of pipe material, manufacturer, type of joint and type of joint restraint.

3. Types and sizes of sheeting and piling together with location, dimensional, and elevation data on any pile caps, tie backs, anchors, whalers or other appurtenant structures left in place.

4. External wiring has been terminated inside the panel at the designated “terminal boxes” in accordance with the approved electrical schematic and/or shop drawings.

5. The electrical control panel has been installed and its components match approved shop drawings and are in compliance with the Department's Standards and Specifications.

6. The electrical power and control diagrams are current and reflect all approved plans and/or field modifications made, if any.

7. The electrical control panel and associated electrical equipment are safe to energize and operate.

E. The electrical control panel manufacturer shall certify that:

1. The installed control panel has been inspected at the job site.

2. The control panel and its components match approved shop drawings and are in compliance with project's plans and specifications.

3. The control panel and its components have not been modified, changed or altered in any way, shape or form as to void the Underwriter Laboratory (UL) listing.

4. The electrical control panel and its components are safe to energize and operate

1.07 QUALITY ASSURANCE

A. Contractor's Responsibility

1. As-Built/Record Drawing preparation and submittal shall be the responsibility of the Contractor. The final As-Built/Record Drawings shall be completed and submitted to the Department prior to pressure testing, pending to show only portions of the Project not authorized to be done before certification of the system, such as interconnections, abandonments, cut and plugs, etc.; those activities shall be reflected on the final As-Built/Record Drawing and resubmitted within ten (10) County calendar days after a successful test. Testing will not be considered complete until As-Built/Record Drawings, field book data and other record documents are submitted and approved by the Department.

2. As-Built/Record Drawings shall be checked by the Contractor for errors and omissions prior to submittal to the Department.

3. For Donation Projects: A Bill of Materials (on Department form) shall also be certified as correct by signature and presented at the time of As-Built submission. Quantities shown on the Bill of Materials shall match installed and As-Built quantities, not quantities proposed, bid or bought nor scaled distances or quantities.

B. Professional Surveyor and Mapper Responsibility

1. The PSM shall be responsible for all locations, measurements and associated information on the As-Built/Record Drawings.

2. Infrastructure being shown on As-Built/Record Drawings shall have been located under the direction of a Florida Registered Professional Surveyor and Mapper.

3. As-Built/Record Drawings shall meet the requirements established in these specifications.

1.08 PHASING

A. Phasing of projects must be approved by the Department and such approval communicated to the Inspections Unit. Where phasing is approved the following additional requirements for As-Built/Record Drawings shall apply:

1. The phase number must appear prominently on each sheet.

2. A prominent phase line shall be drawn at the junctures of the submitted phase with any previous or subsequent phases. The phase line shall be labeled and the phase numbers on either side of it identified.

3. Work in previous or subsequent phases shall be "hatched" out or dashed in plan and profile and labeled "Not a Part" to clearly eliminate it from the As-Built/Record Drawings.

4. Clearly show what is part of the present phase and what is part of previous or subsequent phases at the tie-in points or phase lines. Make certain that this matches what was previously submitted with any earlier phases.

5. Unless otherwise authorized, phases shall end at a valve for water and force mains, and at a manhole for gravity sewers.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 GENERAL

A. If construction drawings are used to create the As-Built/Record Drawings, all "proposed" construction related information such as “equal to”, “typical”, “approximately”, “shall”, etc. shall be removed from As-Built/Record Drawings, leaving only "As-Built" information reflected on the drawing. Do not remove any information on materials installed. The construction drawings need to be adjusted accordingly to reflect constructed as-built information.

B. Site location sketch shall be provided showing the Project site and surrounding area with all streets clearly named, its own north arrow and a readable scale. The section, township and range shall also be provided therein.

C. Provide separate water and sewer profiles.

D. When the main crosses a utility or structure, the two points providing the clearance shall be identified, measured and recorded. This shall apply to all utilities (water, sewer, sewer laterals, water services, gas, electric, storm, telecommunication, duct banks, etc.).

E. All mains shall be stationed, and all facilities and infrastructure labeled. As-Built/Record Drawings shall show stations for all services. As-Built lengths and distances for service runs shall also be given.

F. Stations shall run along the baseline.

G. For water mains, force mains and gravity sewers use one continuous stationing system.

H. Where different stationing systems cross, show the equation station.

I. Label with station and offset all valves, fittings, services, outlets, manholes, deflection points and other components in the line. The labels, stations and offsets shall coincide, plan and profile.

3.02 REQUIRED INFORMATION AND MEASUREMENTS

A. Set-Up Verification

1. The Contractor's Florida Registered Professional Surveyor and Mapper is required to recover the design baseline and verify the elevations and coordinates on a regular basis as needed.

2. The Florida Registered Professional Surveyor and Mapper shall establish and maintain throughout the construction the property boundaries and easements of pump stations and any other Department's facilities and infrastructure. The PSM shall verify that the work of the Project does not encroach into adjacent (abutting) property. Property corners lost during construction shall be reset at the first opportunity to ensure that the work is done within the designated limits. The PSM shall note on As-Built/Record Drawings any Department approved encroachments into pump station site (fencing, driveways, etc.).

3. The Contractor is required to have a level instrument setup next to the construction site in order to control the vertical alignment of the pipe installation prior to trench backfilling. The level shall be setup daily for use by the PSM, Contractor's foreman and Department Engineer/Inspector.

4. The Contractor is required to have a survey crew record the field information on a daily basis when there is underground facilities and infrastructure installation. The survey crew shall be on-site as needed to record and verify the information before it is covered. Any underground construction work that does not have the information recorded by a survey crew will be stopped by the Department Engineer/Inspector. The Engineer/Inspector has the authority to order re-excavation of work that was covered without accurate survey measurements.

B. Field Book Information

1. The Florida Registered Professional Surveyor and Mapper is required to have his crews make daily visits to the Project site during underground pipe installation work to perform field measurements of the Contractor's daily installations. This information shall be recorded in field books. Copies of the field notes are required to be provided to the Construction Manager/Inspector

on a monthly basis. The PSM's field notes shall be submitted to the Department along with final As-Built/Record Drawings (signed and sealed) as a condition of conveyance (for donation projects), or monthly basis as a condition of payment and at substantial completion (for contract projects) before applying for final payment. Electronic field raw data is acceptable.

C. As-Built/Record Drawings Content Requirements and Procedures

1. The following shall be made a part of any As-Built submittal for water or sewer, where applicable:

a. Project name, Project identification number and the words "As-Built/Record Water" or "Record Drawing Water" or "As-Built/Record Sewer" or "Record Drawing Sewer", all prominently displayed. PMS's or Engineer's name, company, address, phone number and certification statement shall also be displayed.

b. All applicable permit numbers for the Project shall be shown on the cover sheet.

c. Graphic and numeric scale, north arrow and any symbol legend needed.

d. All involved streets shown with centerlines, right-of-way lines, widths and names, with matching plat, if applicable, subdivision name, phase line and number. (Phasing to be nearest valve and manhole in limits of phase area). Show station at all intersecting streets.

e. All involved lots and blocks shown and correctly designated (to match plat).

f. All control lines identified (i.e. centerline, section line, monument line, property line, etc.). Identify all streets by name or number.

g. Baseline shall be tied to centerlines, boundary lines, section corners, or to monument lines or to right-of-way lines. Baselines must show bearings or deflection angles, or delta, radius, chord and arc length for curves.

h. Pipeline shall be tied to a baseline that is easily identified on the existing or proposed right-of-way. Baseline shall not be on top of the main except for gravity sewers installed on centerlines.

i. Show all horizontal curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

j. Stationing shall proceed from south to north and/or from west to east. Stationing shall be the same as shown on construction drawings and must be tied to section corners, centerline intersections and all other pertinent control points within the Project. All such pertinent points shall have their stationing shown and where there is dual stationing for a point, both stations shall be called out.

k. Horizontal Control

1) The PSM shall show on the As-Built/Record Drawings the Florida State Plane Coordinate (current readjustment - NAD 83,

FLA East Zone 901) with at least two physically located horizontal control points within the Project limits.

2) For As-Built/Record Drawings within Department facilities with relative coordinates, a coordinate conversion equation needs to be included on every sheet.

l. Vertical Control

1) As-Built/Record Drawing shall use the same datum as per approved design plans.

2) Nationwide, surveys and As-Built/Record Drawings are in the process of conversion to NAVD 88 from the NGVD 1929. The Department will accept NAVD 88 datum with a conversion factor to NGVD 1929 on each page.

3) For projects using City of Miami datum provide a conversion factor on each page to NGVD 1929 datum.

m. Easements

1) Easements, if any, shall be clearly shown with size, coordinates for each corner and tied to the property line. The easements shall be separate for water, sewer, force main and pump stations.

2) Existing easements with Official Record Book (ORB) information must be shown.

3) Easements are required for any infrastructure not in the public right-of-way. An easement may also be required for a main in the public right of way if there is insufficient side clearance to the right-of-way line to permit maintenance of the pipeline (usually 6' for water and 7.5' for force mains and gravity sewer mains on each side measured from the center of the pipe). For pipelines larger than 16-inches in diameter the easement size shall be determined by the Department.

4) Easement lines shall be tied to the centerline of the main.

5) Show easement released with Miami Dade County Clerk of the Court Official Record Book (ORB) and page.

n. Tie-in Points

1) All tie-in points, water or sewer shall be tied to the baseline.

2) In instances where this is impractical such as for service installations, the tie-in location may be referenced to a known Department facility such as a valve or manhole. This facility must be fully identified with atlas page, Department As-Built/Record Drawing number and page and its designation and station as given therein. Approval for this method of location shall be secured with the As-Built Reviewer/Inspector.

3) All locations for future connections or tie-ins shall be left unburied and uncovered until the Contractor’s Florida

Registered Professional Surveyor and Mapper measures and records the As-Built information.

4) Clearly show and label what is new and what is existing at the tie-in points with the WASD As-Built/Record Drawing number identified on the existing main.

o. The ends of all services and laterals shall be fully located by reference to the main and the nearest property line(s).

p. Show all outlets, stub-outs, sewer lateral, water service and any other relevant information. Identify the size, material, length, direction and elevation (top of pipe for water and force main, invert for gravity sewer).

q. On all pipe fittings of 36-inches diameter or larger, including tees, bends, crosses, wyes and bevels, station and elevation shall be taken at the end and center points to reflect the true elevation and orientation of the fitting.

r. Elevations of natural ground or pavement over pipelines shall be shown at each position where the pipe elevation is shown at least every 100 feet on profile view.

s. Show profile view of the main pipeline installation on the same sheet as the plan view. Stationing on both views shall be aligned to facilitate As-Built review.

t. Manhole rim and valve box rim elevations shall be shown.

u. Show all invert and bottom elevations in manholes and valve vaults or boxes.

v. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the pipe line being constructed within 250 feet of point of crossing.

w. Location, elevation, material and size of all casings shall be shown. Launching and receiving pits location and dimensions shall be shown in case of jack and boring or micro tunneling used for casing installation.

x. Types, sizes of sheeting and piling together with measured and complete locations with dimensions, top and bottom elevations of all sheeting and pile caps, tie backs, anchors, whalers or other appurtenant structures including sheeting left in-place, shall be shown.

y. Where service is not at a right angle (90 degrees) to main line, tie service with length of offset to nearest property line.

z. For Horizontal Directional Drilling installations, in addition to the applicable items already mentioned on this section, As-Built/Record Drawings shall include:

1) Equipment used.

2) Angles at entry and exit and radius.

3) Bore path report to include detection method used, location for both entry and exit referenced to a permanent structure,

information of the company collecting the data, such as company name, address, date, staff information who collected the data.

4) The Department shall be provided with As-Built/Record Drawing for any failed bore path.

aa. Provide State Plane Coordinate values and elevations for all visible features such as valves, fittings, service lines, manholes, fire hydrants, water sampling points, water meters, cleanouts and backflow preventers, utility poles, adjacent to the main, overhead wires crossing the main and other appurtenances along the main. Also provide State Plane Coordinate values for existing valves and manholes at points of connection or closest to the point of connection and the point of connection itself.

bb. Lines that are abandoned in place, placed out of service or removed shall be clearly identified (dashed and bold line type) on the As-Built/Record Drawings to include cut and plug locations, pipe material and existing As-Built location. Include the existing As-Built/Record Drawing numbers. State whether cut and plug was performed by Department forces.

cc. Include a statement showing work performed by the Contractor under Department's licensed operator supervision.

dd. Mechanical restraints shall be identified on the As-Built/Record Drawing. The restraint system used shall be identified (gland restrained, joint restrained or gasket restrained). If thrust blocks are constructed, the top elevation, outer dimension, thickness of the block, length and location of any sheet piling, if used, shall be recorded by the Contractor's PSM.

ee. Large diameter concrete transmission mains 42-inches and larger shall show each pipe joint with station and pipe length.

ff. Restrained pipe, end line valves, thrust blocks shall be left uncovered for the last complete length. In line valves and tees shall be left exposed for one length on both sides plus the face end. Measure and record the elevation, horizontal and vertical alignment, and inclination for these items.

gg. For pipeline projects, provide dimensions and elevations of ground and top of pipe every one-hundred feet maximum, or portion thereof along the pipeline, at every significant change on ground elevation, at every horizontal and vertical change in direction and at all fittings, with stations.

hh. If an asset is authorized to be reused, clearly show that asset, such as a fire hydrant, is being reused.

ii. Pipeline must be identified by type of pipe material, manufacturer, type of joint and type of joint restraint.

jj. The identity, dimension, location and elevation of any existing utilities crossing the proposed line and so immediately adjacent to the new line

as to be exposed by the excavation shall also be recorded. Locate, excavate, expose and record the same data for any utility shown in the plans whose proximity to the proposed pipeline could affect the certification requirements of the new installation. Note that in instances of a very wide ditch due to ground conditions the recording of data for adjacent, paralleling, utilities shall only be required for lines which come within three feet of the outside (but not less than the minimum required per FAC 62-555.314) of the pipe being installed unless otherwise ordered by the Department whose decision shall be final.

kk. Specific location and elevation of equipment, buildings and miscellaneous items installed inside the buildings shall be recorded as applicable and as required by the Department.

ll. Without exception, where the substitution of a piece of equipment for that shown on the Plans has been allowed, the footprint, clearance and elevation dimensions shall be recorded by the Contractor's PSM and these changes shall be accurately and thoroughly portrayed on the As-Built/Record Drawings.

2. As-Built/Record Drawings for **water and sewer force mains** shall additionally include the following:

a. Plan view showing size, material, offset of main, deflections (if any), stations and offsets of services, hydrants and fittings at the main; and at main, deflections (if any) and the end of the service line.

b. Profile showing ground and top of pipe elevation every 100 feet, maximum, and at any change in grade (with corresponding station) and at every fitting. Show size and material of pipe, all fittings and extend of restrained pipe with stations. Stationing system shall be the same as that used in the plan view.

c. Distances from main to all valves, fire hydrants and meter boxes shall be shown. Tie hydrants to right-of-way. In established areas, the PSM shall run-out right-of-way lines.

d. All "Assembly Detail" shall be provided for all turbo meter installations and for all meters greater than four (4) inches.

e. Label water service as either double, single, irrigation, and so on, based on type of service, including diameter and material.

f. When meter banks are used, show typical detail with size of service line, material and type of services.

g. Location of all air release valves and top of pipe elevation, identifying if the air release valves are automatic or manual.

h. Valves must be identified by size, type, and end condition. Manufacturer's name and number of turns required to open or close the valve shall be provided for valves 16 inch or larger.

3. Gravity sewer As-Built/Record Drawings shall additionally include the following:

a. Plan showing manhole numbers and stations, size and material of pipe,

manhole to manhole length and slope in percentage. The size, material, station and lengths of laterals shall also be shown. Stationing shall be in accordance with the approved permit Plans.

b. Profile showing manhole numbers (as per plan), rim elevations, invert elevations in and out of each manhole with directions, length and slope of line. Pipes with a slope less than the minimum recommended by RER (formerly Department of Environmental Resource Management) minimum for a particular size of pipe shall not be accepted.

c. Stations and offsets of all wyes and tees for laterals and location of cleanouts with distance to property line.

d. Connections to existing sewer collection systems with flow direction shown.

e. Show profile for sewer laterals crossing utilities, with invert elevations at main, at crossings, at change in direction and at clean out, including slope, clearance at crossing and station.

f. When connecting a new main or lateral to an existing main, the As-Built/Record Drawing shall show distance and invert elevations of downstream and upstream existing manholes.

4. The following shall also be included on As-Built/Record Drawings for sewer pump stations and other infrastructure:

a. A complete topographic and boundary survey for the pump station and/or other facilities signed and sealed by the Florida Registered Professional Surveyor and Mapper as part of the As-Built/Record Drawings. All information required of a boundary survey, such as property corners, setbacks, dimensions of the structure and appurtenances, etc. shall be contained on the As-Built/Record Drawings to include the legal description of pump station site and/or other facilities, easements and rights-of-way abutting the pump station site and location of all surface facilities recorded by a PSM. All utilities within pump station property shall be properly shown, along with their associated elevation and clearance.

b. Horizontal and vertical locations of all fittings, deflections, or at any significant change of direction, and at a maximum 25- foot intervals for on-site (e.g. on a facility such as a pump station or plant work).

c. Plan and vertical cross-section of the station showing and identifying the piping and mechanical layout. Show elevations for top of wet and dry wells, bottom of wet well, pipe inverts, finish floor elevation, etc.

d. FEMA flood zone and elevation shall be shown on the cover sheet.

e. Electrical As-Built/Record Drawing control and riser/one-line power schematic diagrams, RTU wiring diagram and all other elevation and any other electrical details.

f. Engineering Report as to the pump manufacturer, size, capacity (TDH), peak design capacity (in GPM) and Bill of Materials (for donation projects).

g. The mechanical, structural and electrical record drawings are to be prepared by the Engineer of Record or a designated Florida Registered Professional Engineer, each sheet of the record drawings must be signed and sealed by the Engineer of Record or a designated Florida Registered Professional Engineer. The cover sheet is to be signed and sealed by the Engineer of Record or a designated Florida Registered Professional Engineer and shall include the following statement:

1) "I certify that these record drawings have been reviewed by me or by individual(s) under my direct supervision and that these drawings incorporate the information contained in the certified As-Built/Record Drawings. To the best of my knowledge and belief these record drawings substantially reflect the sanitary sewer pump station and/or other infrastructure as constructed, and as depicted on the permit plans including any Department approved deviations, if any. The accuracy of these record drawings is reliant on the accuracy applied by the PSM that prepared the certified As-Built/Record Drawings, which was [include the PSM's name, business name, PSM number, address and telephone number]. The PSM has certified to me in writing, that the As-Built location information of the sanitary sewer pump station and/or other infrastructure conforms to the standards of practice for land surveying, Chapter 5J-17 of the Florida Administrative Code."

3.03 DEPARTMENT PROCESSING

A. The Department will require 10 County calendar days to perform the As-Built review.

B. As-Built/Record Drawings will be initially reviewed, commented and/or recommended to be approved, from construction perspective, by the responsible Field Inspector, who shall verify that they are an accurate representation of the work as installed and that the job as shown is complete and in accordance with the permitted plans.

C. Following the Field Inspector's review, As-Built/Record Drawings will be reviewed in depth by the As-Built Reviewer to ensure compliance with these specifications. The Reviewer will also check the complete package which for donation projects shall include the Bill of Materials.

D. The complete submittal package as defined above shall be delivered using the applicable Department's system.

E. Cause for Non-Review

1. If review by the As-Built Reviewers reveals excessive errors or omissions, the As-Built/Record Drawings shall be deemed "non reviewable". As-Built/Record Drawings containing excessive errors or omissions shall include those with omission of major sections of the installation, water and sewer As-Built/Record Drawings on same sheet, those lacking large amounts of information and other

rrors or omissions that are considered excessive in the opinion of the As-Built Reviewer.

2. In cases when an As-Built/Record Drawing is considered "non-reviewable", it shall be marked "Not Reviewable", the reviewer shall note comments regarding obvious problem(s) and shall be returned to submitter. Such As-Built/Record Drawings will not be considered as having been reviewed for the purposes of Sub-section F, Punch List, below.

F. Punch List (for donation projects only)

1. Punch List items may be generated from the Department initial review. Successive reviews are solely for the purpose of ensuring that original punch list items are completely and correctly done to obtain a final As-Built/Record Drawing acceptable to the Department.

2. Successive punch list items may only be added to correct a problem resulting from submitter's efforts to comply with the original punch list. The Department will prevent adding new punch list item(s). Submitter shall be required to make these successive changes.

3. In the case of a major oversight on the part of the As-Built Reviewer, punch list items may be added to the list or requested to the submitter after the valid time for such items. The Department requires that all corrections be made as a condition of accepting the final As-Built/Record Drawings.

G. Acquisition and Resubmittal

1. After notification from the Department, DWFX and/or PDF file with markups along with the As-Built punch list (donation projects only) can be obtained from the applicable Department’s System.

2. After making the corrections requested on the As-Built/Record Drawing set and punch list, upload the revised package to the applicable Department’s System. On contracts, contractor shall resubmit corrected As-Built/Record Drawings to the Department within 10 County calendar days for contracts

3. The Department will require 10 County calendar days to perform the As-Built/Record Drawing review.

H. Disputes or Interpretation

1. Resolution of disputes and interpretation of these requirements is the responsibility of the As-Built Reviewer. Submitting parties are urged to work with him to resolve any problems of this nature.

2. Where necessary, the submitting party may request a hearing with the Department’s PSM in matters of dispute or interpretation. The Department’s PSM's decisions shall be final.

END OF SECTION

SECTION 01730

OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 SCOPE OF WORK:

A. Prepare Operating and Maintenance (O & M) Manual covering all equipments and systems provided under this project.

B. Instruct Department's personnel in the operation of equipment and maintenance provided under this project.

C. This Section covers the services of the manufacturer's representatives and special coordinating services required of the Contractor that shall apply during construction, facilities startup, and training of the Department's personnel for facilities operation.

D. The Contractor shall inform all subcontractors and manufacturers of the requirements herein and include the following services in his costs for the work. Where a minimum amount of time is stated in the Technical Specifications for manufacturer's services, any additional time required to perform the specified services shall be at no additional cost to the Department.

1.02 FORM, FORMAT AND SUBMITTALS CONTENTS:

A. Operating and Maintenance manuals will be used for use by Miami-Dade Water and Sewer Department personnel in the operation and maintenance of the various systems.

B. The Department shall be furnished with one set of any special tools required for servicing for each type of equipment actually furnished.

C. Prepare data in the form of an instructional manual for use by Department's personnel.

D. Format:

1) Size: 8½ in. x 11 in.
2) Paper: 20-pound minimum, white, for typed pages.
3) Text: Manufacturer's printed data or neatly typewritten.
4) Drawings:
   (a) Provide reinforced punched binder tab, bind in with text.
   (b) Fold larger drawings to the size of the text paper.
5) Provide fly-leaf for each separate product, or each piece of operating equipment.
   (a) Provide typed description of product, and major component parts of equipment.
   (b) Provide indexed tabs.
6) Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:
   (a) Title of Project.
   (b) Identify of separate structure as applicable.
   (c) Identity of general subject matter covered in the manual.

E. Binders:

1) Commercial quality three-ring binders with durable and cleanable plastic covers.
2) Maximum ring size: As required (Minimum 1½-inches).

F. Content of Manual:

1) Neatly typewritten table of contents, arranged in a systematic order.
   (a) Contractor, name of responsible principal, address and telephone number.
   (b) A list of each product required to be included, indexed to the content of the volume.
   (c) List, with each product, the name, address and telephone number of:
      (i) Subcontractor or installer.
      (ii) Maintenance contractor, as appropriate.
      (iii) Identify the area of responsibility of each.
      (iv) Local source of supply for parts and replacement.
   (d) Identify each product by product name and other identifying symbols as set forth in Contract Documents.

G. Product Data:

1) Include only those sheets which are pertinent to the specific product.
2) Annotate each sheet to:
   (a) Clearly identify the specific product or part Installed.
   (b) Clearly identify the data applicable in the installation.
   (c) Delete references to inapplicable information.

H. Drawings:

1) Supplement product data with drawings as necessary to clearly illustrate:
   (a) Relations of component part of equipment and system.
   (b) Control wiring, schematic wiring, and flow diagram.
2) Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
3) Do not use Project Record Documents as maintenance drawings.

I. Written text, as required to supplement product data for the particular installation:

1) Organize in a consistent format under separate headings for different procedures.
2) Provide a logical sequence of instructions for each procedure.

J. Copy of each warranty, bond and service contract issued.

1) Provide information sheet for Department's personnel, give:

   (a) Proper procedures in the event of failure.
   (b) Instances which might affect the validity of warranties or bonds.

1.03 MANUAL FOR EQUIPMENT AND SYSTEMS:

A. Content, for each unit of equipment and system, as appropriate:

1) Description of unit and component parts.

(a) Function, normal operating characteristics, and limiting conditions.
(b) Performance curves, engineering data and tests.
(c) Complete nomenclature and commercial number of all replaceable parts.

2) Operating Procedures:

(a) Start-up, break-in, routine and normal operating instructions.
(b) Regulation, control, stopping, shut-down, and emergency instructions.
(c) Special operating instructions.

3) Maintenance Procedures:

(a) Routine operations.
(b) Guide to "trouble shooting".
(c) Disassembly, repair, and reassembly.
(d) Alignment, adjusting, and checking.

4) Servicing and lubrication schedule.

(a) List of lubricants required.

5) Manufacturer's printed operating and maintenance instructions.

6) Description of sequence of operation by control manufacturer.

7) Original manufacturer's parts list, illustration, as drawings and diagrams required for maintenance.

(a) Predicted life of parts subject to wear.
(b) Items recommended to be stocked as spare parts.

8) List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.

9) Other data as required under pertinent sections of specifications.

B. Prepare and include additional data when the need for such data becomes apparent during instruction of Department's personnel.

C. Additional requirements for operating and maintenance data: The respective sections of Specifications.

1.04 POSTED OPERATING INSTRUCTIONS:

A. General: Operating instructions and diagrams shall be prepared for posting near the equipment. Posted operating instructions shall be photographic or equal non-fading reproductions framed under glass encased in non-discoloring plastic and shall be mounted in location directed. Copies of the posted operating instructions shall also used with the operating and maintenance manuals as a basis in training employees in the operation and maintenance of systems and related equipment installed.

B. Contents: Posted operating instructions shall consist of simplified, consolidated equipment, control and power diagrams graphically representing the entire system and actual equipment installed, including concise written instructions on how to start and stop systems, what settings and conditions are to be observed and what control adjustments are to be made or maintained by the operation.

1.05 MANUFACTURER'S NAMEPLATES:

A. Each major component of equipment to have manufacturer's name, address, model number and rating on a plate securely affixed in a conspicuous place. Nameplate of a distributing agent will not be acceptable in lieu of manufacturer's nameplate.

B. Nameplate shall be die-stamped, engraved, or etched to guarantee long term legibility.

1.06 GUARANTY/WARRANTY:

A. The Contractor shall guarantee that all new equipment has the capacity specified and that it will operate without excess noise or vibration.

B. Contractor shall furnish a written guarantee covering all workmanship and materials for a period of one (1) year, from the date of acceptance. This shall include an agreement to repair or replace, at his expense, all defects that may appear in that time, which in the opinion of the Department, are due to defective workmanship or materials.

C. Copies of factory warranties on all equipment furnished shall be submitted with the above described, written guarantee period, and included in maintenance manuals.

1.07 OPERATION AND MAINTENANCE RESPONSIBILITY:

A. Contractor shall provide all required service and maintenance on all equipment installed under this contract for one (1) year following final acceptance or the beginning of beneficial use by the Department. The starting date of one (1) year service period shall be determined by the Department. Included in the service and maintenance to be provided during this one (1) year period, shall be all required lubrication, adjusting belt tensions, eliminating excessive noise and vibration, correcting all electrical and mechanical faults, recording all permanent installed gauge meter and temperature readings, and other general service items, including the answering of service calls.

B. Services During Construction:

1) General: Competent and experienced technical representatives shall represent the manufacturers of all equipment and systems as many days as may be necessary to resolve assembly or installation problems at the worksite which are attributable to, or associated with, the equipment furnished. This requirement applies to manufacturers of all equipment furnished, whether or not specifically set forth in the Technical Specifications.

2) Manufacturer's Certificate of Proper Installation: Where called for in the Technical Specifications, the manufacturer's representative shall provide a certificate stating that the equipment or system has been installed in accordance with the manufacturer's recommendation and has been inspected by a manufacturer's authorized representative, that it has been serviced with the proper initial lubricants, that applicable safety equipment has been properly installed, and that the proper electrical and mechanical connections have been made.

C. Functional Testing Assistance:

1) Where functional (or run) testing is called for on the Technical Specifications, the manufacturer's representative shall assist with the initial test, which shall include checking for proper rotation, alignment, speed, excessive vibration, and noisy operation. Initial equipment and system adjustment and calibrations shall be performed in the presence of and with the assistance of the manufacturer's representative. The previously specified Manufacturer's Certificate of Proper Installation shall include the statement that proper adjustment have been made and that the equipment or system is ready for plant startup and operation.

2) The Contractor, as applicable to the equipment furnished, shall state in writing that all necessary hydraulic structures, piping systems, and valves have been successfully tested; that all necessary equipment systems and subsystems have been checked for proper installation, started, and successfully tested to indicate that they are all operational; that the systems and subsystems are capable of performing their intended functions; and that the facilities are ready for startup and intended operation.

D. Training of Owner's Personnel

Where called for in the Specifications, the manufacturer's representative shall provide detailed instructions to the Departments personnel for operation and maintenance of the specified equipment. These training services shall include pre-startup classroom and onsite equipment instruction and/or post-startup classroom and onsite equipment instruction, as stated in the Specifications.

PART 2 - PRODUCTS

(Not used)

PART 3 - EXECUTION

(Not used)

END OF SECTION

SECTION 01750

MAINTENANCE OF TRAFFIC AND PUBLIC STREETS

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall be responsible for providing the Engineer with Maintenance of Traffic (M.O.T.) plans for lane closures and/or detours for approval. These M.O.T. plans shall be produced by an individual employed by the Contractor and certified as "Work Zone Traffic Safety Supervisor" by the American Traffic Safety Service Association, ATSSA.

B. The Contractor shall be responsible for the maintenance of public streets and traffic control for the duration of the project. The cost of Traffic Control including the cost of any required off duty police officers shall be included under the appropriate bid item in the Proposal. If no bid item for this is included, said costs shall be included in other appropriate items of the bid and no extra compensation will be allowed.

1.02 REGULATIONS

A. As used herein, any reference to Miami-Dade County, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas or streets, or their departments, published regulations, permits or data. The Contractor shall abide by all applicable laws, regulations, and codes thereof pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this Project.

1.03 MAINTENANCE OF TRAFFIC (M.O.T.)

A. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control, and other provisions throughout the Project as required by the MDCDTPW, Traffic Engineering Division (Traffic Division), FDOT or other governing agency. Traffic shall be maintained according to corresponding typical traffic control details as outlined in the MDCDTPW Manual. No street shall be completely blocked, nor blocked more than one-half at any time, keeping the other one-half open for traffic, without specific approval.

B. If required by the Traffic Division, the Contractor shall make arrangements for the employment of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. The cost of such off-duty policemen shall be paid from the Quotation Item established for this purpose. If required by traffic control permits or agencies, the Contractor shall work, odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction and no extra compensation will be

allowed.

C. The Contractor shall provide all barricades with warning lights, necessary arrow boards and signs, to warn motorists of the work throughout the Project. Adequate approved devices shall be erected and maintained by the Contractor to detour traffic.

D. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. The Contractor shall provide necessary access to all adjacent property during construction.

E. The Contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the MDCDTPW Manual. In addition, the Contractor shall be responsible for the resetting of all traffic control and information signing removed during the construction period.

F. Where excavations are to be made in the vicinity of signalized intersections, the Contractor is alerted that vehicle loop detectors may have been embedded in the pavement. Every effort has been made to show the approximate locations on the Plans; however, the Contractor shall verify these locations by inspecting the site of the work and by contacting the Traffic Division. Any loop detector which is damaged by the Contractor, whether shown on the Plans or not, shall be repaired or replaced by the Contractor, at his expense, and to the satisfaction of the Traffic Division.

G. Where applicable, the Contractor shall notify the Traffic Division 24 hours in advance of the construction date or 48 hours in advance of construction within any signalized intersection.

H. Temporary pavement will be required over all cuts in pavement areas, and also where traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed and the swale or median areas restored to their previous condition.

I. Pavement markings damaged during construction shall be remarked, as required by the Traffic Division.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 02230

CLEARING AND GRUBBING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Clear and grub the areas to be occupied by the facilities or utility systems to be constructed, including all areas to be excavated, filled, paved or planted as shown on the approved plans and as specified herein.

1.02 DEFINITIONS

A. Clearing shall consist of the cutting, removal and satisfactory disposal of all trees, stumps, brush, shrubs, rubbish and any other objectional material within the designated areas.

B. Grubbing shall consist of the removal and disposal of all stumps larger than 1-1/2 inches in diameter and other objectional material to a depth of at least 12 inches below the ground surface.

1.03 QUALITY ASSURANCE

In the course of the work, it may become to remove trees if they interfere with the work. Dade County and various municipalities have ordinances regulating the removal, relocation and pruning of trees in the public right-of-way, these ordinances shall be strictly adhered to. The Contractor shall obtain a permit from Dade County and/or other regulatory agencies having jurisdiction over the work area before removing, relocating and/or pruning any tree. The Contractor shall comply with all requirements and conditions of the permit.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 CLEARING AND GRUBBING

A. The Contractor shall remove and replace, where required all existing shrubbery, trees, grass, sprinklers, fences, signs, mailboxes, structures, roadways, sidewalks, curbs and similar items or structures in the way of all excavation necessary for the construction of the project.

B. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges. Where such cutting is for the purpose of pipeline installation, saw cutting shall be either parallel or at right angles with the centerline of the pipe,

C. To protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction, prior to proceeding with any work in the vicinity.

3.02 PROTECTION OF ADJACENT AREAS

The Contractor shall protect areas shown on the Drawings or designated by the Engineer of Record to remain protected from damage by construction operations by erecting suitable barriers of other acceptable means.

3.03 DISPOSAL

All roots, vegetation and other refuse removed from the site during clearing and/or grubbing operations shall be legally disposed of by the Contractor. Where required, the Contractor shall obtain a permit from Miami-Dade County and/or other regulatory agencies having jurisdiction over the work area before burning any material on the site.

- END OF SECTION -

SECTION 02260

STEEL SHEET PILING

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish and install steel sheet piling as shown in the plans or as required for a complete and satisfactory installation.

PART 2 - PRODUCTS

2.01 STEEL SHEET PILING

A. Steel sheet piling shall conform to the requirements of "High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality", ASTM A572/A572M-94b (AASHTO No. M223).

B. The Contractor will be responsible for design and selection. Structural plans for the sheet steel piling installation and the calculations for the required Section Modulus and the Sheet Piling Designation shall be prepared by a Professional Engineer registered in the State of Florida. Sealed plans shall be submitted to the Engineer of Record for approval prior to installation of the piling system.

B. Structural steel shall meet the requirements of ASTM Standard A36/A36M-94 "Structural Steel".

PART 3 - EXECUTION

3.01 The Contractor will be responsible for removing the temporary sheet piling and structural steel at the completion of the Project, such material will remain the property of the Contractor.

END OF SECTION

SECTION 02314

EXCAVATION, BACKFILL AND FILL FOR STRUCTURAL FACILITY AND UTILITY SYSTEMS

PART 1 - GENERAL

1.01 SCOPE OF WORK:

A. The work included under this Section consists of furnishing material and equipment, and performing all labor necessary for excavating, backfilling, filling and compaction of areas to be occupied by facilities or utility systems to be constructed.

B. Plan For Excavation: Prior to commencing the excavation, the Contractor shall submit a plan of his proposed operations to the Engineer of Record for approval. The Contractor shall consider, and his plan for excavation shall reflect, existing utilities that are to remain, the equipment and methods to be employed in the excavation.

1.02 QUALITY ASSURANCE

All excavations shall conform with South Florida Building Codes, the State of Florida Trench Safety Act, OSHA requirements and the provisions herein. Excavations shall be executed in accordance with all applicable requirements of Section 01016, including notification of Sunshine State One-Call Center (1-800-432-4770) 48 hours prior to any excavation.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Structural Fill: Structural fill shall consist of an inorganic, non-plastic, granular soil containing less than 10 percent material passing the No.200 mesh sieve (relatively clean sand or crushed limerock with a 2-inch max. particle size) with a Unified Soil Classification of GP, GW, SP, SP-GM, SW-SM or SP-SM.

B. Ballast Rock: Ballast rock shall be composed of hard, durable, sound pieces having a specific gravity of not less than 2.65. It shall be crushed rock conforming to the following gradation:

U.S. Standard sieve size	Percent by weight passing
1-1/2 inch	100
3/4 inch	30-75
½ inch	15-55
1/4 inch	0-5

C. Suitable Backfill Material: Backfill material shall be clean and free from all organic material, clay, marl or unstable materials, debris, lumps, or broken paving. No rocks or stones larger than 6 inches in diameter shall be allowed in any backfill. Material for backfill may be material resulting from excavation, if suitable in the opinion of the Department.

D. Select Backfill Material: Select backfill material specified herein shall meet all the general requirements for backfill material set forth above, and in addition, shall be free of any rocks or stones larger than 2 inches in diameter. Select backfill material may be material resulting from trench excavation, if suitable in the opinion of the Department, carefully selected to comply with these requirements.

PART 3 - EXECUTION

3.01 PREPARATION:

A. Clearing: The construction site shall be cleared of all obstructions and vegetation, including large roots and undergrowth, within 5 feet of the lines of excavation, in accordance with Section 02230. All debris created by this clearing operation shall be hauled from the site and disposed of by the Contractor.

B. Removals: Complete all removals within the lines of excavation prior to beginning excavation. Where required, all existing shrubbery, trees, grass, sprinklers, fences signs, mailboxes, structures, sidewalks, curbs, utility poles, or structures subject to damage resulting from the excavation should be transplanted, relocated, braced, shored, or otherwise protected and preserved.

3.02 EXCAVATION

A. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depths shown on the approved plans, but in all cases as required for construction, and as specified herein. All excavations shall be made by open cut.

B. When the walls of the excavations are to be kept vertical and in order to protect the safety of workmen, the general public, this or other work or structures, or excavation walls, or pipe installation including materials encountered in the excavation which have a tendency to slough or flow into the excavation, undermine the banks, weaken the overlying strata, or are otherwise rendered unstable by the excavation operation shall be retained by steel sheeting, stabilization, grouting or approved methods. Said methods shall comply with the Trench Safety Act (TSA). Sheeting and shoring or other approved method shall be designed by a Professional Engineer licensed to practice in the State of Florida.

C. For structures, the Contractor shall maintain the bottom of the excavation firm and dry, and maintain an elevation of the water one (1) foot below the concrete to be placed, by use of pumps, tremie or other acceptable method.

D. In areas where trench widths are not limited by right-of-way or easement widths, property line restrictions, existing adjacent improvements including pavements, structures, and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material.

E. Ladders or steps shall be provided for and used by workmen to enter and leave trenches.

F. Excavated material shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks. In congested areas, such materials, cannot be stored adjacent to the trench nor used immediately as backfill, shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, it shall be removed immediately to a storage area.

G. Materials suitable for use as backfill be hauled to and used in areas where not enough suitable material is available from the excavation. Material unsuitable for use in backfill shall be removed promptly and disposed of by the Contractor. Any pockets of organic matter, concrete or other unsuitable material encountered in excavating shall be removed and replaced with material satisfactory to the Department.

H. The excavation of walls for forms will not be permitted.

I. Excavation for structures:

1. Clear, as stated above, all existing items or structures in the way of the proposed pipeline or structures, and excavate as necessary to the depths and dimensions shown on the Plans, but in all cases as necessary for satisfactory installation.

2. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall, in general, be either parallel or at right angles.

3. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the Department.

4. Where interlocking steel sheeting is used, the Department may require that the sheeting be cut off at a level two (2) feet above the top of the installed pipe and that portion below the level be left in place.

5. Excavation for manholes and other piping appurtenances shall be sufficient to leave at least two (2) feet clear between their outer surfaces and the embankment or sheeting.

6. If, in the opinion of the Engineer of Record or the Department, the soil at that depth is unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the excavation shall be continued two (2) feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required.

7. When the pipe to be installed in a trench requires the pipe installers to work under and around the pipe, the Contractor may request the Department that he be allowed to exceed the 12" maximum clearance, specifying the clear distance desired.

8. The ends of existing mains shall be temporarily capped or plugged to keep them clean and the ends of all mains shall be temporarily anchored to keep the joints from blowing apart from internal pressure until the new mains can be reconnected to them.

9. In addition to specific construction methods specified, the general requirements in subsequent subsections, below, shall apply to the work of this project.

3.03 DEWATERING

A. Any water which accumulates in the excavations for structures shall be removed promptly by means satisfactory to the Engineer of Record in such a manner as to not create a nuisance to adjacent property or public thoroughfare. Pumps and engines for dewatering systems shall be operated with mufflers and at a minimum noise level suitable to a residential area. The Contractor shall be responsible for any nuisance created due to the disposal of the water from his drainage system.

B. Where applicable, the Contractor shall be required to obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-way or into any existing drainage structure or facility.

3.04 STOCKPILED MATERIALS

Suitable materials removed from the excavation shall be stored and disposed of in a manner which will not interfere with traffic at the site. Material suitable for backfill and not needed for backfill at the structure, but needed elsewhere shall be stockpiled until moved and used elsewhere.

3.05 BACKFILL

A. The excavation shall then be brought to the structures bottom elevation by placing and compacting 6-inch layers of Oolitic limerock (or material previously defined) to 95 percent of maximum density as determined by AASTHO T-180. Structural fill shall be supplied by the Contractor except as may otherwise be carefully selected from excavated material if deemed suitable in the opinion of the Engineer. Backfill around new structures up to the pavement base or surface of the ground shall be material not exceeding 6-inches in diameter, and shall be compacted in layers not exceeding 9 inches. Each layer shall be compacted with a powered hand tamper, or other approved method to at least 98% of maximum density as determined by AASHTO T-180

B. Backfill for precast manholes shall be drainfield limerock or specified pipe bedding material to a level to receive the manhole at the proper elevation.

END OF SECTION

SECTION 02315

TRENCHING AND BACKFILLING FOR PIPING SYSTEMS

PART 1 - GENERAL

1.01 WORK INCLUDED

A. The work included under this Section consists of excavating, backfilling and compaction as required for the construction of the piping systems as specified herein. (See Section 02314 for excavation for structures.)

B. All excavations shall be executed in accordance with the South Florida Building Codes, the State of Florida Trench Safety Act (TSA), OSHA requirements and all applicable requirements of Section 01016, including notification of Sunshine State One-Call Center (1-800-432-4770), 48 hours prior to any excavation.

PARTS 2 - PRODUCTS

2.01 BACKFILL MATERIAL

A. Except where a 1:10 cement/sand or flowable fill concrete mix is required (See Section 02745), granular soil backfill materials shall be utilized. Suitable backfill material shall be clean, shall not be expansive nor have high organic content, shall be free of clay, marl, unstable materials, debris, lumps and clods, and shall meet the following requirements:

1. Maximum Liquid Limit shall not exceed 12 as determined by ASTM D 423.

2. Maximum Plasticity Index shall not exceed 35 as determined by ASTM D 424.

3. Not more than 10 percent of weight shall be finer than 74 micron (No. 200) U.S. Standard Sieve.

B. Backfill material containing limerock shall have sufficient sand to fill the voids in the limerock. No stones or rocks larger than 6-inches in diameter will be permitted in any backfill. Backfill material placed to a point at least one foot (1 ft.) above pipe and appurtenances shall be select backfill material not exceeding 2-inches in diameter. For PVC gravity sewers backfill material placed at least two feet (2 ft.) above pipe shall be select backfill material not exceeding 2-inches in diameter. In any case, above this point, but up to the upper 6-inches of the trench, backfill shall be of material not exceeding 6-inches in diameter.

C. Debris, broken paving or broken concrete shall not be used.

D. Material for backfill may be material resulting from excavation, only if it meets the above mentioned requirements, or if suitable in the opinion of the Department. If sufficient suitable backfill material, including select backfill material, is not available from the site, additional material shall be furnished.

2.02 SELECT BACKFILL MATERIAL

Select backfill material specified in these specifications or required by the Plans shall meet all the general requirements for backfill material set forth above, and in addition, shall be free of any rocks or stones larger than 2 inches in diameter. Select backfill for copper tubing shall be limerock screenings or sand. Select backfill material may be material resulting from excavation, if suitable in the opinion of the Department, carefully selected to comply with these requirements.

2.03 BEDDING MATERIAL

Pipe bedding material shall consist of one of the following types of material, and accordance with the Department's Standard Details: (See Section UC-300 for Gravity Sewer Piping Foundations)

A. Bedding may be select backfill material, as specified above, if approved by the Department.

B. Crushed stone (or drainfield limerock) shall be used for bedding of piping (except for copper pipe) and/or manholes as shown on the Standard Details. Crushed stone shall consist of hard, durable, sub-angular particles of proper size and gradation, and shall be free from organic material, wood, trash, sand, loam, clay, excess fines and other deleterious materials. The stone shall conform to the requirements of ASTM C 33, Size No. 57 (3/4-inch rock) and be graded within the following limits:

Sieve Size	Percent Finer by Weight
1 ½-inch	100
1-inch	95 to 100
½-inch	25 to 60
No. 4	0 to 10
No. 8	0 to 5

C. Sand for bedding copper pipe shall be a dry screened sand. Sand shall be graded sand with 100 percent passing a 3/8-inch sieve and not more than 5 percent passing a No. 200 sieve.

D. Limerock screenings, sand or other fine material shall not be used for bedding.

E. All pipe bedding material shall be new, unless otherwise approve by the Department. Existing pipe bedding material may not be used.

2.04 BACKFILL UNDER MANHOLES AND METER VAULTS

Any excavation below the levels required for the proper construction of manholes or meter vaults shall be filled with Class C concrete. The use of earth, rock, sand or other materials for this purpose will not be permitted. (See Section 02314 for excavation for structures.)

PART 3 - EXECUTION

3.01 CLEARING

A. The Contractor shall perform all clearing necessary for the proper installation of all piping and appurtenances in the locations shown in the Drawings, in accordance with Section 02230, "Clearing and Grubbing".

B. Where required, all existing shrubbery, trees, grass, sprinklers, fences, signs, mail boxes, structures, sidewalks, curbs, utility poles or structures subject to damage resulting from the excavation should be transplanted, relocated, braced, shored, or otherwise protected and preserved.

3.02 EXCAVATION

A. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depth shown on the Drawings. All excavations shall be made by open cut.

B. When the walls of the excavations are to be kept vertical and in order to protect the safety of workmen, the general public, this or other work or structures, or excavation walls, or pipe installation including materials encountered in the excavation which have a tendency to slough or flow into the excavation, undermine the banks, weaken the overlying strata, or are otherwise rendered unstable by the excavation operation shall be retained by steel sheeting, stabilization, grouting or approved methods. Said methods shall comply with the Trench Safety Act (TSA). Sheeting and shoring or other approved method shall be designed by a Professional Engineer licensed to practice in the State of Florida.

C. In areas where trench widths are not limited by right-of-way or easement widths, property line restrictions, existing adjacent improvements including pavements, structures, and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material, but only from a point one foot above the crown of the pipe.

D. A substantially and safely constructed moveable shield or box, as approved by the Engineer of Record, may be used in place of sheeting, except where specifically called for on the Plans to install sheeting. Where a moveable shield or trench box, is used in place of sheeting and shoring, the trench shall be opened immediately ahead of the shield as pipe laying proceeds inside the shield.

E. Ladders or steps shall be provided for and used by workmen to enter and leave trenches.

F. Materials removed from the trenches shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks. In congested areas, such materials, cannot be stored adjacent to the trench nor used immediately as backfill, shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, it shall be removed immediately to a storage area.

G. Materials suitable for use as backfill be hauled to and used in areas where not enough suitable material is available from the excavation. Material unsuitable for use in backfill shall be removed promptly and disposed of by the Contractor

H. Excavation for Pipes and Piping Appurtenances (See Section UC-300 for additional requirements for gravity sewer piping):

1. Clear, as stated above, all existing items or structures in the way of the proposed pipeline or structures and excavate as necessary to the lines and grades shown on the Plans.

2. Where pavements or sidewalks are cut they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall in general be either parallel or at right angles with the centerline of the pipe.

3. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the Department.
4. Excavate pipe trenches to a minimum of 6-inches below the outside bottom of the proposed pipe barrel to provide for the installation of the bedding material.

5. If, in the opinion of the Department, the soil at that depth is unsatisfactory as foundation material because it contains unsuitable marl, muck, organic matter, or other unsuitable material, the excavation shall be continued 2 feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required.

6. If the soil is still unsuitable after the additional excavation as prescribed above, the trench bottom shall be excavated further in one foot increments in accordance with "Trench Overcut", below.

7. Sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures.

8. Where wood sheeting or certain designs of steel sheeting are used, the Department may require the sheeting to be cut off at a level 2-feet above the top of the installed pipe and that portion below that level shall be left in place.

9. If interlocking steel sheeting is used, the Department may permit its complete removal in lieu of cut-off, providing removal can be accomplished without disturbing the bedding, pipe or alignment of the pipe. Any damage to the pipe bedding, pipe or alignment of the constructed utility caused by removal of sheeting shall be cause for rejection of the affected portion of the work. Not more than 100-feet of trench shall be opened ahead of pipe laying operations at one time unless a greater length of open trench is approved by the Department.

10. Trench widths, when measured at a point 12 inches above the top of the pipe, shall provide a 12-inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench width shall provide at least 6-inches clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used.

11. Excavation for appurtenances, such as manholes and valves, shall be sufficient to provide a clearance between their outer surfaces and the face of the excavation or sheeting, if used, of not less than 12-inches. Manhole excavations shall be carried to sufficient depth to permit their construction on the undisturbed bottom of the excavation.

12. Excavation for thrust block shall be made in such a manner so that, when concrete is placed, it will bear against a firm, undisturbed, vertical trench wall with bearing are in accordance with the schedule shown in the Standard Details.

13. Selected backfill shall then be placed and compacted in 6-inch layers up to the level of the pipe bedding material.

14. When the pipe to be installed in a trench requires the pipe installers to work under and around the pipe, the Contractor may request the Department that he be allowed to exceed the 12" maximum clearance, specifying the clear distance desired. The decision of the Department in this regard shall be final.

15. The ends of existing mains shall be temporarily capped or plugged to keep them clean and the ends of all mains shall be temporarily anchored to keep the joints from blowing apart from internal pressure until the new mains can be reconnected to them.

16. In addition to specific construction methods specified, the general requirements in subsequent subsections, below, shall apply to the work of this project.

I. Excavation for PVC Gravity Sewers and Service Laterals:

1. The Contractor shall make all excavations necessary for the construction of the gravity sewers and service laterals to the lines and grades shown on the Plans, and in accordance with the Standard Details.

2. In stable soils, trench widths when measured to a point 12 inches above the top of the pipe shall provide a 12-inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench widths under the same conditions shall be 6-inches on each side for the pipe for 4-inch and 6-inch pipe, and 9-inches on each side of the pipe for 8-inch pipe and larger. Minimum trench widths are required to provide room for a man to place and compact the haunching and initial backfill material. Embedment material shall be Class I. (See Section UC-300)

3. In unstable soils (defined as peat, much or other organic soils, elastic silts and clays below the water table, and fine sands below the water level), trench widths when measured at a point 12-inches above the top of the pipe shall be a minimum of five (5) nominal pipe diameter in width. Slightly greater width are at the Contractor's option in order to accommodate his trenching equipment, but the pipe bedding material shall extend to the face of the excavation, or sheeting if used. Embedment material shall be Class II. (See Section UC-300)

3.03 TRENCH STABILIZATION

Trench bottoms which are rendered soft or unstable as a result of construction methods, such as improper or inadequate sheeting, dewatering or other causes, shall be stabilized. In no event shall pipe be installed when such conditions exist. The Contractor shall correct such conditions so as to provide proper bedding or foundations for the proposed installation.

3.04 TRENCH OVERCUT

A. If, after excavating the trench to a depth of 2 feet 6 inches below the outside bottom elevation of the proposed pipe barrel, and the soil at that depth is still unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the pipe trench shall be excavated further in one-foot depth increments until a suitable foundation material is found. As a point of reference, it has been the Department's experience that, typically, trench overcut does not extend to depths more than 6 feet. However, the Department reserves the right to require trench overcut to depths up to 6 feet, i.e., to a point 8.5 feet below the bottom of the pipe.

B. Select backfill, as defined above, shall then be compacted in 6-inch layers up to the bottom of the proposed 6 inches of pipe bedding.

3.05 REMOVAL OF WATER

A. It is a basic requirement of these Specifications that excavation shall be free from water before pipe or structures are installed. However, it is realized that in certain sections of the work this cannot be accomplished economically and the Contractor may request permission to use the "Alternate Method of Construction" defined below.

B. The Contractor shall provide all necessary pumps, underdrains, well point systems, and other means for removing water from trenches and other parts of the work including structures. The Contractor shall continue dewatering operations until the backfill has progressed to a sufficient height over the pipe to prevent flotation or movement of the pipe in the trench, so that the backfill is above the natural water level.

C. Where applicable, the Contractor shall be required to obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-away or into any existing drainage structure or facility.

D. Water from the trenches and excavation shall be disposed of in such a manner as will not cause injury to public health, to public or private property, to the work completed or in progress, to the surface of the streets, or to cause interference with the use of the same by public. Submit the proposed method of handling and disposal of trench waster for approval before starting the excavation.

E. The Contractor is cautioned that Dade County or other governing body having jurisdiction over the work location may have regulatory rules and ordinances prohibiting, or limiting, the discharge of water from any excavation into sanitary and storm sewer systems, or to canals and drainage ditches. Obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-way, or into any existing drainage structure or facility.

F. Pumps and engines for dewatering systems shall be operated with mufflers and a minimum noise level suitable to a residential area. The Contractor shall be responsible for any nuisance created due to the disposal of the water from his discharge system.

3.06 INSTALLATION OF BACKFILL

A. Backfilling of pipe trenches will not be allowed until the work has been approved by the Department, pressure tested if required, and the Department indicates that backfilling may proceed. Any work which is covered or concealed without the knowledge and consent of the Department shall be uncovered or exposed for inspection. Partial backfill may be made to help restrain the pipe during pressure testing, if previously authorized by the Department.

B. The Contractor shall backfill all trenches and other excavations made in the process of installing the pipe. He shall maintain the surface of the backfill free from major irregularities and potholes.

C. Select backfill material shall be placed under and around the pipe to one foot above the crown (or to two feet above crown for PVC gravity sewers) in 6-inch layers. Each layer shall be thoroughly compacted to at least 90 percent of maximum density as defined by AASHTO Standard No. T-180, "Moisture-Density Relations of Soils using a 10-lb. (4.54 kg.) Rammer and an 18-in. (457 mm) Drop". The material in the ditch may be compacted by either hand tamper or a mechanized power tamper, provided the results obtained meet the continued approval of the Department. Particular attention and care shall be exercised in obtaining thorough support for the branch of all service connection fittings. Care shall be taken to preserve the alignment and gradient of the installed pipe.

D. Backfilling and compacting of material lying above a point one foot (or two feet for PVC pipe), above the crown of the pipe and below the pavement base or the surface of the ground, if out of pavement, shall be accomplished in layers not exceeding 9 inches in thickness. Each layer shall be thoroughly compacted with a powered hand tamper or a mechanized power tamper to at least 98 percent of maximum density as determined by AASHTO Specification T-180 or such greater density as may be required by the governing authority over the area in which the work is performed. A testing laboratory will make periodic field tests to determine the density being obtained in each lift, or layer, or the backfill. When compacted backfill fails to meet the specified percentage of maximum density as shown by test results, it shall be reworked and recompacted, and then retested. The reworking, recompacting and retesting of the backfill shall be repeated as many times as may be necessary to obtain compacted backfill with density meeting or exceeding the specified percentage as indicated by test results.

E. The Contractor shall exercise proper care to insure that no pipe will be broken or displaced through the use of the type of mechanical compacting equipment he selects. Water shall be added as required to obtain optimum moisture to facilitate compaction, but ponding or inundation of backfill will not be permitted. These ponding limitations shall not prohibit backfill in a wet trench up to the level of the natural water table if the "Alternate Method of Construction" is utilized.

F. Backfill shall in general be kept up with the rate of pipe laying. The backfill up to the springline of the pipe shall be placed as soon as practical after the laying of the pipe. On parts of the line where ground water level may be high enough to float the pipe, the placing of the backfill and the rate of pumping the trench shall be so controlled as to prevent the pipe from floating or moving from the line and grade shown on the Plans.

G. In the event that sufficient suitable material is not available at any point to properly backfill the trench, the Contractor shall transport suitable material from points of the line where such material is available or shall otherwise furnish suitable material.

H. Suitable material in excess of all backfill requirements and all unsuitable material shall be removed from the work and disposed of by the Contractor.

I. Within paved areas of trench excavation, the base and surfacing shall be reconstructed as specified under Section 02745, "Pavement Removal and Replacement".

J. Where cuts have been made through unpaved, stabilized rock roadways, driveways and parkways, surface restoration shall consist of 3 inches of compacted limerock overlaid by 3 inches of gravel or graded and washed rock with a maximum diameter of ½-inch, except as otherwise directed by the Department. The rock shall be installed over the entire width of the disturbed area and shall closely match the existing rock at each location. Several grades of rock may be required to attain this end, but it is not anticipated that more than one grade will have to be used at any one location.

K. Backfill for Structures: See Section 02314.

3.07 INSTALLATION OF PIPE BEDDING - FORCE MAIN AND WATER MAIN

A. As described above, all pipe trenches shall be excavated to a level 6-inches below the outside bottom of the proposed pipe barrel. The resulting excavation shall be backfilled with approved pipe bedding material, up to the level of the outside bottom of the proposed pipe barrel. This material shall be tamped and compacted to provide a proper bedding for the pipe and shall then be shaped to receive the pipe, including recesses for the pipe bells and couplings. Placing and compacting bedding up to the level of the lower one-third of the pipe barrel shall immediately follow the installation of the pipe. Bedding shall be provided under the branch of all fittings to furnish adequate support and bearing under the fitting.

B. Select Backfill material may be utilized where the excavated trench bottom is above water.

C. Any excavation below the levels required for installation of the pipe bedding shall be backfilled with approved bedding material, tamped, compacted and shaped to provide proper support for the proposed pipe.

D. For installation of gravity sewers, see Section UC-300, "Gravity Sewer Pipe Foundation".

3.08 COMPACTION AND DENSITIES

A. Methods of control and testing of backfill construction to be employed in this work are:

1. Maximum density of the material in trenches shall be determined by AASHTO Designation T 180.

2. Field density of the backfill material in place shall be determined by AASHTO Designation T 238.

B. Laboratory and field density tests are necessary to establish compliance with the compaction requirements of these specifications. The Department will not accepts projects for which successful laboratory and field density test results are submitted. Tests will be made at depths and locations to the satisfaction of the Department.

C. Trench backfill which does not comply with the specified densities, as indicated by such tests, shall be reworked and recompacted until the required compaction is secured.

3.09 ALTERNATE METHOD OF CONSTRUCTION

A. General:

1. A combination of conditions in the substrata, water table, or method of disposal may be encountered during the course of the work which make dewatering impossible, or only possible through the use of unusual methods, the cost of which is excessive. When such conditions are encountered, but only after all reasonable means to dewater the excavation have been employed without success, the Contractor, with the concurrence of the Department may elect to employ the following alternate method of construction. The concurrence of the Department shall be obtained and the Contractor shall limit the use of the alternate method of construction to such specific portions of the work as determined applicable.

2. The requirements set forth in other sections of these Specifications shall establish the required standards of construction quality for this work. Use of the alternate method of construction described hereinafter shall in no way be construed as relieving the Contractor of his basic responsibility for satisfactory completion of the work.

3. Subject to all of the requirements stated hereinabove, including approval by the Department, construction will be permitted in accordance with the following specifications.

B. Removal of Water: The installation of pipe, manholes and appurtenances under water will be permitted and the dry-trench requirements of "Removal of Water" will be waived.

C. Excavation: Excavation shall be performed in accordance with normal applicable excavation specifications.

D. Pipe Bedding for Ductile Iron and Vitrified Clay Pipe:

1. Pipe bedding shall be placed from 6-inches below the outside bottom of the proposed pipe barrel up to the level of the springline of the pipe barrel of gravity sewers and to the level of the lower one-third of the pipe barrel for force mains or water mains. The bedding material shall be washrock, drainfield limerock or approved material. Limerock screenings, sand or other fine organic material shall not be used.

2. The bedding material used shall be tamped and graded to provide a proper bedding for the pipe and shall then be shaped to receive the pipe. Bedding shall be provided under the branch of all fittings to furnish adequate support and bearing under the fitting.

E. Bedding for PVC Pipe: The pipe bedding, haunching and initial backfill material shall conform to embedment material listed in Section UC-300 for either stable or unstable soil conditions as required, and shall be placed and compacted in as stated in "Installation of Pipe Bedding", above.

F. Backfill:

1. After the pipe is installed, backfilling shall proceed in accordance with the provisions of "Installation of Backfill", except that select backfill material or pipe bedding material shall be used to backfill around the pipe and to a level one foot above the outside top (crown) of the pipe. Under no circumstances shall material other than select backfill or specified pipe bedding material be considered satisfactory for this purpose.

2. If the Alternate Method of Construction is used, all backfill material, shall be carefully lifted into the trench and released to fall freely therein when the bucket or container is near or at a moderate height above water level. Height of release shall be to the satisfaction of the Department. Below the existing water level, and to a point not more than 18-inches above the water level, the backfill material shall be carefully placed into place in uniform layers, of equal depth on each side of the pipe. From a point not more than 18-inches above the water level, and below the pavement base or the surface of the ground if out of paving, backfill material shall be placed and compacted for normal backfilling as provided in "Installation of Backfill" and "Compaction and Densities".

G. Backfill for PVC Gravity Sewers:

1. After the pipe is installed, backfilling shall proceed in accordance with the provisions of "Installation of Backfill", except that select backfill material or pipe bedding material shall be used to backfill to a level two feet above the outside top (crown) of the pipe. Under no circumstances shall material other than select backfill or specified pipe bedding material be considered satisfactory for this purpose.

2. If the Alternate Method of Construction is used, all embedment and backfill material, shall be carefully lifted into the trench and released to fall freely therein until the bucket or container is at or just above water level. Below the existing water level, and to a point not more than 18-inches above the water level, the backfill material shall be carefully placed into place in uniform layers, of equal depth on each side of the pipe. From a point not more than 18-inches above the water level, and below the pavement base or the surface of the ground if out of paving, backfill material shall be placed and compacted for normal backfilling as provided in "Installation of Backfill" and "Compaction and Densities".

3.11 RESTORATION OF EXISTING SURFACES

Paved and grassed areas disturbed by the operations required under this Section shall be restored as indicated on the approved Plans and/or specified herein.

END OF SECTION

SECTION 02534

PUMP STATION TESTING

PART 1 GENERAL

1.01 SCOPE

A. The Contractor shall test sewage pump station, to the complete satisfaction of the Engineer, prior to final acceptance by the Department.

B. The Contractor shall provide start-up service to place the pumps and controls in proper operation. During this service, the operation of the equipment will be reviewed and the station will be inspected for proper installation and operation. This service shall be provided by a representative of the manufacturer. The Contractor shall inform the Department 48-hours prior to commencement of such services. These services shall be at no additional cost to the Department.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 GENERAL

A. The Engineer and the Contractor shall jointly be present to witness test for determination of conformance with approved plans and specifications.

B. The Contractor shall notify the Department a minimum of forty-eight (48) hours in advance of the test.

3.02 PROCEDURE FOR TESTING SEWAGE PUMP STATION

A. The Contractor shall be responsible for testing the pump station in the manner described below:

1. Place the operating mode selector switch in the manual position.
2. Fill wet well with water.
3. Start and stop each pump sequentially and then both pumps together. While doing this, add water to the wet well as necessary.
4. With water level lower than pump's shut-off point, place selector switch to automatic position.
5. Fill wet well slowly. Observe lead pump run.
6. Increase water flow into wet well for lag pump to run.
7. Stop pouring water into wet well and observe as both pumps shut off at the pre-selected levels.
8. Disconnect power to pumps and fill wet well to alarm level and make sure it operates.

9. Disconnect level controller and check that the lead pump is turned "on" and "off' at the proper levels by the float switches.

B. If the above parts of the test show that any component is not operating as intended, make necessary adjustments and/or repairs and repeat steps 1 through 9, until the entire system operates trouble free.

C. Fill the wet-well with water to the invert of the influent pipe. Leave it full of water for at least two hours. If the water level goes down, locate and repair the leak to the satisfaction of the Department. Repeat test to insure absence of leaks.

3.03 GENERATOR START-UP

A. Upon completion of the initial start-up and system checkout, perform a field test, with the Engineer notified in advance, to prove full specified power, stability, voltage and frequency. The test shall run for four hours using a portable, dry resistive load bank capable of incremental loading. Use the load bank instrumentation to check the meters on the generator. The generator set shall be able to take its full rated KW load when applied in one step. The generator set shall also run continuously for four hours with all available load connected through the automatic load transfer switch. Records shall be maintained through the testing periods on coolant temperature, lubricating oil pressure, ambient air temperature, voltage, current, frequency and kilowatts. Record the data at fifteen minute intervals through the tests. There shall be a thirty minute unloaded run at the conclusion of each test to allow the engine to cool down before shutdown. Three copies of the field tests data shall be furnished to the Engineer. The generator set shall also be tested under a simulated power failure to check that the transfer sequence operates satisfactorily.

3.04 CERTIFICATIONS

A. At the time of final acceptance inspection, and in addition to all other submittals required by the specifications, the Contractor shall furnish the following to the Engineer:

1. Submit letter from electrical panel manufacturer certifying that:

    a. The electrical panel has been inspected at the jobsite, after complete installation.
    b. The electrical panel and its components match approved shop drawings and are in compliance with the project's plans and specifications.
    c. The electrical panel and its components have not been modified, changed or altered in any way, shape, or form as to void the Underwriter Laboratory "UL" listing.
    d. The electrical panel and its components are safe to energize and operate.

2. Submit letter from the Contractor certifying that:

    a. The electrical panel has been installed in accordance with the Department's standards and these specifications.
    b. External wiring has been terminated inside the panel at the

designated “Terminal Boxes,” in accordance with the approved electrical schematic and/or shop drawings.

c. The electrical panel and its components have not been modified, changed or altered in any way, shape, or form as to void the Underwriter’s Laboratory “UL” listing.

d. The electrical panel and its components match approved shop drawings and are in compliance with the Department’s specifications.

e. The electrical wiring schematic and control schematic are current and reflect all approved field modifications made, if any.

f. The electrical panel associated electrical equipment are safe to energize and operate.

END OF SECTION

SECTION 02536

PRECAST MANHOLES & COVERS

PART 1 - GENERAL

1.01 SCOPE OF WORK:

This section includes minimum construction requirements for standard sewer manholes and precast concrete wet wells. It also includes precast concrete manhole sections with bell and spigot joints with masonry transition to covering, anchorage, coating/lining and accessories.

1.02 REFERENCES:

Unless otherwise indicated, all materials, workmanship and practices shall be in accordance with the current editions of the following standards:

A. Florida Building Code

B. ACI 318, Building Code Requirements for Reinforced Concrete; ACI 350 Code Requirement for Environmental Engineer Construction Structures.

C. PCI MNL 116, Manual for Quality Control for Plants and Production of Precast Concrete Products.

D. ASTM C62 - Specification for Building Brick (Solid masonry units made from Clay or shale).

E. ASTM C478 - Precast Reinforced Concrete Manhole Sections.

F. ASTM A123 - Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Products.

1.03 SUBMITTALS, INSPECTIONS:

Submit the following information for approval. Fabrication shall not begin until submission has been approved.

A. Satisfactory evidence that plant and production methods meet the requirements of PCI MNL 116 for the Quality Control of the Precast Plant, Concrete Batch Plant and Testing Lab.

B. Submit Design mix to the Engineer prior to fabrication.

C. Complete shop drawings of both concrete structure and castings and showing all dimensions, reinforcement data, concrete strengths, etc. If of a non-standard design or if required by the Engineer of Record submit design calculations and data. All computation shall bear the seal of a Professional Engineer registered in the State of Florida.

D. Manhole and Wet Wells: The WASD shall have the option of witnessing the manhole wet well pour, reinforcing or formwork prior to fabrication. Provide the Engineer a schedule of the manhole fabrication at the preconstruction meeting.

E. Provide a rebar cutting lists for Pump Station Wet Wells. The rebar cut list is not required for standard manholes.

F. Cylinder breaks shall be done for each lot in accordance with FDOT Standards (max of 50 structures per LOT). The manufacturer shall maintain records of the cylinder breaks for each design mix. The 28 day concrete cylinder break reports shall be submitted to the Department once the 28 day before the project closeout.

1.05 QUALIFICATIONS:

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum five years documented experience. United Concrete Products, Landmark Precast, Concrete Products of the Palm Beaches, TJ Precast, US Concrete Products or Approved equal.

B. Quality Control Plan approved by the FDOT. The testing laboratory and batch plant shall be included in the FDOT Quality Control Plan.

C. The Precast Manufacturer shall have a stamp from the Quality Control Manager on each completed precast structure. The Quality Control Manager Stamp shall indicate that the manhole was constructed in accordance with ASTM C478 and Municipality Standards and the date that the structure was fabricated.

1.06 TRANPORTATION

A. The precast concrete structure shall cure for a minimum of 72 hours. Transport of the precast structure to the jobsite is not allowed during the 72 hour curing period.

B. Comply with all applicable requirements of FDOT Section 450-16 Handling, Storage, Shipping and Erection.

PART 2 - PRODUCTS

2.01 MATERIALS:

Precast manholes shall conform to the requirements of ASTM C478, latest edition, the Miami-Dade Water and Sewer Department Standard Details and the following:

A. Properties:

1. Reinforcement of Grade 60 bars. (Pump Station Wet Wells require rebars not wire mesh reinforcing).
2. Concrete 4,000 psi.
3. Water Cement Ratio: 0.40 to 0.34 Standard Manholes, 0.34 Pump Station Wet Wells.
4. Waterstops: Ribbed PVC Waterstop with centerbulb.

B. Cement shall be Type II with a **maximum aggregate size of #57**. Aggregate shall be **well graded** to produce a less porous and stronger concrete.

1. **Gravity Sewer System Manholes**: In sanitary sewage applications, all manholes receiving the discharge of a force main, connecting to a major sewer line or interceptor sewer terminal manhole within a 350 foot radius of the pump station, drop manholes, or where called for in the plans and/or specifications shall have a concrete protective coating or a antimicrobial admixture in the concrete mix.

   The antimicrobial admixture in the concrete mix is specified below:

   a. An antimicrobial agent, Con^{MIC}Shield®, or approved equal, shall be used to render the concrete uninhabitable for bacteria growth.
   b. Contractor shall mix the liquid antimicrobial additive with the total water content of the concrete mix design in a proportion of 1 gallon per cubic yard. In the case of repairs to damaged concrete a proportion of 2 gallons per cubic yard shall be utilized.
   c. In some instances all of the concrete in the structure will receive the additive and in other instances only a portion of the concrete will receive the additive. Hence, the Contractor shall apply the additive only as directed in the specific instance.
   d. Precast Plant shall submit a letter of certification to the Department, stating that the correct amount and correct mixing procedure was followed for all antimicrobial concrete.
   e. Con^{MIC}Shield® antimicrobial additive shall be as manufactured by Con^{MIC}Shield® Technologies, Inc.; 541 Tenth Street NW #233, Atlanta, GA 30318; Phone: (877)543-2094.

2. **Pump Station Wet Wells**

   a. Pump Station Wet Wells shall have Xypex/BASF Crystalline Waterproofing Admixture or approved equal, applied at 2 to 3% of the weight of portland cement in the wet well by volume. The Crystalline Waterproofing Admixture shall be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy.

   b. Do not use Con-Shield with the Crystalline Waterproofing Admixture

   c. Concrete Protective Coating Preparation: The precast concrete structure with the Crystalline Waterproofing Admixture is required to cure for 28 days prior to application of the concrete protective coating. Prepare the interior wet well surface with an epoxy cement underlayment compatible with the concrete protective coatings approved for Pump Station Wet Wells, Epoxytec CPP, Tnemic 218 or approved equal.

C. Minimum shell thickness of manholes shall be eight (8) inches.

D. Lifting holes through the structure will not be permitted.

E. Three to five courses of brick shall be constructed atop the manhole corbel for height adjustment. Manhole adjustment grade rings may be utilized in lieu of clay bricks.

F. Precast Joints above Elevation +4.0. and Waterproofing

1. Standard Manhole: Ram-Nek preformed plastic joint filler, Swellseal Hydrophillic Waterstop by Deneef, or approved equal. Apply Non-Shrink Grout both inside and outside of the joint. Wrap the outside Corbel and Exterior joint with a heat activated high shrink membrane.

2. Pump Station Wet Wells: Ram-Nek preformed plastic joint filler, Swellseal Hydrophillic Waterstop by Deneef, or approved equal. Apply Xypex Concentrate Cementitous Slurry or approved equal to the exterior and interior of the joint between precast members for waterproofing.

G. Holes for pipe connections, with a diameter equal to the outside dimension of the connecting pipe plus an additional 4-inches, shall be formed in the manhole walls. No cutting or chipping of the pre-formed holes, or cutting additional holes in the precast concrete walls will be permitted.

H. The bottom slab shall be cast monolithically with the lower section and the longitudinal reinforcement extending into the slab. The free air drop of the mix shall not exceed five feet.

I. No construction joints will be allowed below an elevation of four feet above mean sea level. Construction joints will be allowed above elevation+4.0, if adequate keyways and waterstops, approved by the Department (Ribbed PVC waterstop with centerbulb), are provided. The Department may approve an alternate joint method in cases of excessively deeper and heavy structures.

J. Built-in ladders or climbing rungs will not be permitted in any sanitary sewer manhole and only in other structures where shown on the Plans and called for in the specifications.

K. Openings shall be sealed with hydraulic cement non-shrink grout on both the exterior and interior of the structure.

L. Furnish manholes with accessories listed under "Manhole Accessories", below.

M. Lid and Frame: See Section 05550, "Castings".

N. Waterproofing:
Xypex Crystalline Waterproofing Admixture C-1000R with red dye or approved equal, applied at 3% of the volume of Portland cement in the manhole by volume.
Rheomac 300D Admixture as manufactured by BASF with red dye applied at 2% of the volume of Portland cement in the manhole by volume.
The Crystalline Waterproofing Admixture may be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy.
Note: The Engineer may accept certification from the precast fabricator in lieu of the red dye.

2.02 CLAY BRICK UNITS AND GRADE RINGS

A. Clay brick shall be used in manhole construction. Clay brick shall conform to ASTM Standard C32, "Building Brick (Solid Masonry Units Made from Clay or Shale)". Bricks shall have true edges and sharp corners and shall have been cured for at least 14 days before being placed in any wall. Under no circumstances shall brick with holes be utilized anywhere in construction of a manhole or other structure unless specifically called out on the Plans or in the Specifications.

B. Manhole adjustment grade rings may be utilized. Rings shall be made of 100% recycled HDPE and available in cone opening diameters of 24, 27, 30 and 36-inches. Slope adjustment shall be attained by rotation of “wedge” rings from 4.1% to 0% grade. Rings shall have been tested to withstand HS25 loading through at least 1,100,000 cycles without cracking or other damage. Rings shall not be damaged by hydrogen sulfide manhole conditions and shall be waterproof when assembled with approved butyl sealant. Ring shall weigh six pounds or less and be equipped with UV inhibitor. Rings shall have been in successful service in multiple locations within the US for at least ten years and shall be warranted for five years. Rings shall be LadTech, Inc. HDPE Recycled Adjusting Rings or approved equal.

C. Exterior Shrink Membrane not required on the HDPE Grade Rings.

2.03 MORTAR AND GROUT: As specified in Section 04060 and 03600, respectively. Only Type II cement shall be used.

2.04 REINFORCEMENT: As specified in Section 03300.

2.05 SUMP: Where required, formed integrally with the base slab.

2.06 CONCRETE PROTECTIVE COATINGS **(Gravity Sewer Manholes)**

A. For manholes standard manholes that do not have a concrete protective coating or an antimicrobial additive (ConShield)in the mix, coat the interior of the manhole with Bitumastic 300M or approved equal, 16 mils minimum thickness. The manholes with a concrete protective coating or ConShield anti-bacterial admixture shall not have Bitumastic on the interior of the manhole.

Locations that require a Concrete Protective Coating or the Con Shield Admixture:

1 Manholes receiving the discharge of a force main.
2 Manholes within a 350 foot radius of a pump station wet well.
3 Drop manholes (if a drop connection is added to an existing manhole the existing manhole shall be rehabilitated with a concrete protective coating).
4 Any manhole location determined by the Engineer to have the probability of generating large quantities of sewer gas.

B. All concrete protective coating systems shall be pre-approved by the Water and Sewer Department based on testing done within the WASD system. Only products that have had a successful test application within the Miami-Dade Water and Sewer Department system and approved by WASD forces shall be allowed.

PREAPROVED PRODUCTS LIST- concrete protective coatings (standard manholes)

1. **Available Manufacturers: The manhole coating products below have passed the WASD testing protocol and have been approved for use for rehabilitation of standard manholes. The manhole rehabilitation products shall be used as a complete system with no third party products used unless approved in writing by the coating manufacturer. A one year warranty on the complete coating system from the project completion is required.**

   a. Uroflex as manufactured by Epoxytec International
   b. PPC as Manufactured by Polymorphic Polymers Corporation
   c. SP15 Spray Mortar, Sewer Guard HBS 100 Epoxy Liner by BASF
   d. Permaform MS-10,000 Fortified with ConShield or Cor-Guard Epoxy
   e. SprayRoq, Spray Wall and SprayShield GT Coating
   f. GEOKRETE System as manufactured by Quadex
   g. Mainstay DS-5 High Build Epoxy, Mainstay ML-72 Restoration Mortar
   h. GML Coating System: Green Monster Epoxy, GML-30 and GML-60 Epoxy Cement
   i. Raven Lining System: Raven 405 Epoxy, Raven 755 Epoxy Mortar

2. The manhole chimney shall utilize a flexible concrete protective coating. The acceptable flexible interior coatings for the manhole Chimeny are Epoxytec Uroseal, Uroflex or Geokrete.

C. Due to the probability of sewer gas generation, all manholes receiving the discharge of a force main, connecting to a major sewer line or interceptor sewer, drop manholes, or within a 350-foot radius of the terminal manhole immediately upstream of the pump station shall be either constructed of concrete containing Con^{MIC}Shield® antimicrobial additive or lined on all interior concrete surfaces with a pre-approved concrete protective coating or approved equal. Concrete protective coating system shall fully protect openings, such as for pipes, to insure that corrosive attack cannot take place at these locations. Protective system design for these areas will be checked as shop drawings. Note that boot systems are not accepted by the Department.

   Since the proprietary grouts used to close the annular area between the manhole wall and pipe entering or leaving the manhole are not compatible to the addition of Con^{MIC}Shield® these areas require liner or coating (as acceptable to the Engineer) protection even in manholes constructed of concrete containing this material.

D. All manhole exterior surfaces, from finished grade to base, shall be coated with Carboline Bitumastic 300M, 2 coats 16 mils minimum thickness or have Xypex/BASF Crystalline Waterproofing Admixture, applied at 2 to 3% of the volume of portland cement in the manhole by volume. The Crystalline Waterproofing Admixture may be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy.

E. If Con^{MIC}Shield® anti-microbial agent is used, interior coating and liners can be eliminated except as specified above.

2.07 CONCRETE ADDITIVE AND PROTECTIVE COATINGS **(Pump Station Wet Wells)**

A. Waterproofing Additive: Xypex Crystalline Waterproofing Admixture or approved equal, applied at 3% of the weight of Portland cement in the manhole by volume. The concrete protective coating shall be applied a minimum of 28 days after the casting of the reinforced concrete structure in order for new concrete to cure.

B. Epoxy Cement Underlayment to smooth and prepare concrete surface Epoxytec Ceramico, Tnemic 218 or approved equal.

C. Preapproved Concrete Protective Coating for Pump Station Wet Wells

1. Uroflex Coating System as manufactured by Epoxytec International
2. PPC as Manufactured by Polymorphic Polymers Corporation
3. or approved equal

2.08 MANHOLE ACCESSORIES:

All new sanitary sewer manholes shall be furnished with the following items. Where existing manholes will be modified or are scheduled to be refurbished, rehabilitation shall also include the following items unless otherwise approved by the Department.

A. Provide concrete protective coating system for manholes installed in locations identified to have high levels of sewer gas.

B. Provide high density polyethylene manhole infiltration inserts in accordance with Section 02625, unless the Department requires the installation of stainless steel insert.

C. Exterior Shrink Membrane on Corbel and Exterior Joint; <u>On all manholes</u> (excluding the HDPE grade rings)install a heat activated, high shrink membrane, on the manhole's exterior, at each section joint and from the cast iron frame to the corbel section. Membrane shall be Wrapid Seal, by Canusa Corrosion Protection and Sealing, or approved equal with the following properties:

PRODUCT COMPONENT	PROPERTY	TEST STANDARD	UNIT	RESULTS
ADHESIVE	Softening Point	ASTM E28	Deg. C (Deg. F)	100 (212)
	Lap Shear Strength	DIN 30 672	N/cm^2 (psi)	8 (12)
BACKING	Tensile Strength	ASTM D638	MPa (psi)	20 (2900)
	Elongation	ASTM D638	%	600
	Hardness	ASTM D2240	Shore D	46
	Abrasion Resistance	ASTM D1044	mg	45
SLEEVE	Peel Strength	ASTM D1000	N/cm^2 (psi)	15 (9)
	Water Absorption	ASTM D570	%	0.05

	Low Temp. Flexibility	ASTM D2671D	Deg. C (Deg. F)	-40 (-40)

PART 3 - EXECUTION

3.01 EXCAVATION:

A. Refer to Section 02314, "Excavation, Backfill and Fill for Structures" for specific procedures, requirements and testing methods appurtenant to the work under this Section.

B. Excavation shall extend to a level 12-inches below the level of the outside bottom of the base slab. If necessary, provide sheeting and shoring for the excavation.

C. Backfill resulting excavation with drainfield limerock or specified bedding material to a level to receive the structure at the proper elevation.

3.02 GENERAL INSTALLATION

A. The precast base shall be set level, with the walls plumb on the graded crushed rock bedding.

B. If any surfaces of structures are exposed to view and to a depth of 6 inches below grade, the Contractor shall fill all depressions and all air holes with mortar, dampen surfaces, and apply an approved bonding agent then spread slurry, consisting of one part cement and one and one-half parts sand, by damp loose volume, on the surface with clean burlap pads and sponge rubber floats. The Contractor shall remove any surplus by scraping and then rubbing with clean burlap. Finish surface shall be suitable to receive paint.

3.03 INSTALLATION OF MANHOLES

A. Place base slab and manhole sections plumb and level. Coat exterior of precast structure with Bitumastic 300M or approved equal. Install heat activated, high shrink membrane, on the manhole's exterior, at each section joint and from the cast iron frame to the corbel section.

B. During all backfilling operations, the backfill level shall be kept even on all sides of the structure. Exercise every precaution to prevent damage to, or unplanned loading of, the structures and its appurtenances.

C. Lay clay brick in running bond. A minimum of three and a maximum of five courses shall be constructed atop each manhole corbel. Lay masonry units in full bed of mortar, with full head joints, uniformly jointed with other work. Stucco inside and out with 3/4-inch of mortar.

D. Set cover frames and covers level without tipping, to correct elevations.

E. Exterior surfaces of all structures shall be painted prior to the installation as specified elsewhere herein.

F. Openings shall be sealed with non-shrink grout. No expanding grout shall be allowed.

G. After satisfactory installation and testing, all interior concrete surfaces of the new manhole shall be seal coated in accordance with Section 2.06-A.

H. The invert channels of the manhole shall be formed of brick or brick rubble thoroughly bedded and covered with sand-cement grout, accurately shaped to a semi-circular bottom conforming to the lower half of the connecting sewer pipe. Steep slopes outside the invert channels shall be avoided. Changes in size and grade shall be made gradually and evenly. Changes in the direction of the sewer or entering branch shall be a smooth curve with radius as long as practicable.

I. It shall be the Contractor's responsibility to assure that the frames and covers are set to match proposed finish paving grades at the manhole locations.

J. Gravity sewers shall connect to the manholes in accordance with Standard Details SS 7.0 and Section UC-250 "Gravity Sewer Systems".

3.04 ALTERNATE INSTALLATION

Installation methods given below in this Section shall only apply if permission is granted by the Engineer of Record to use the "Alternate Method of Construction" as specified elsewhere herein. All provisions of that Section shall be applied to the installation of the structures with the specific modifications as follows:

A. Excavation

Excavation shall be carried to a depth of two feet below the bottom of the base slab.

B. Special Bedding

1. Bedding shall be crushed stone or gravel meeting the requirements of ASTM Standard C33 "Concrete Aggregates", latest edition, gradation 67.
2. The bedding shall be placed in the excavation from cut bottom to the level of the bottom of the slab. Thereafter it shall be thoroughly rammed and tamped by use of a crane and weight or other means suitable to the Engineer of Record to provide a stable base for the structure. Tamping and, if necessary, additional filling shall be carried on until the Engineer of Record is satisfied that a suitably stable base has been created for the structure.

C. Backfill

1. After the structure is installed, special bedding material as specified immediately above shall be carefully hand or machine tamped around the structure up to a level of no more than eighteen inches above the water level. Thereafter the procedures and materials specified for backfill and compaction, shall be used to complete the installation.

2. During all backfilling operations the backfill level shall be kept even on all sides of the structure and the Contractor shall exercise every precaution to prevent damage to, or unplanned loading of, the structure or its appurtenances.

END OF SECTION

SECTION 02540

PUMP STATION

PART 1 – GENERAL

1.01 SCOPE OF WORK

The purpose of this Specification is to establish uniform MD-WASD requirements for the design and construction requirements for wastewater pumping stations. This Specification does not purport to cover all materials or installation procedures which may be required. However, it is intent of the MD-WASD to obtain a complete and working installation under this project, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.02 QUALITY ASSURANCE

All material and installation shall be in accordance with the MD-WASD's Design and Construction Standard Specifications and Details.

1.03 DEFINITIONS

See Section 01005, "Defined Terms"

1.04 PROJECT APPROVAL

The approval of the MD-WASD and the local governing agencies shall be secured, prior to any construction related activity.

1.05 SPECIAL CONDITIONS

The work shall proceed in accordance with the following specification sections, found herein:

A. Section 01011 - Site Conditions
B. Section 01016 - Safety Requirements and Protection of Property
C. Section 01031 - Grades, Lines and Levels
D. Section 01100 - Special Project Procedures
E. Section 01720 - Project Record Documents
F. Section 01725 - Project As-Builts
G. Section 01730 - Operating and Maintenance Instructions
H. Section 01740 - Permits
I. Section 01750 - Maintenance of Traffic and Public Streets
J. Section 16051 – Pump Station Electrical Materials
K. Section 16268 – Low Voltage Variable Frequency Drive
L. Section 16420 - Stationary Engine-Generator Sets
M. Section 16510 – Interior Lighting
N. Section 16780 – S.C.A.D.A. System RTU Installation
O. Section 16940 – Pump Station Control Panel

1.06 PERMITS, INSPECTIONS AND FEES

A. The Contractor shall obtain and pay for all permits and fees in accordance with Section 01740, "Permits".

B. Inspection by MD-WASD personnel is required in addition to, not in lieu of, municipal and County department inspections. No facility will be accepted until it has passed all inspections, including pavement installation or replacement.

1.07 PRECONSTRUCTION CONFERENCE

A. Prior to commencement of the work, the Contractor shall attend a Preconstruction Conference.

1.08 SUBMITTALS

A. The Contractor shall furnish "As-Builts" in accordance with Section 01725. The Contractor shall submit operating and maintenance instructions and all other submittals in accordance with Section 01730.

B. Where the Specifications require test certification or certification that certain products or material furnished are as specified, the Contractor shall deliver such certification to the MD-WASD. No material or equipment shall be approved for use in the work until individual certification has been received.

1.09 DESIGN REQUIREMENTS

A. GENERAL

1. Pumping stations shall be designed in accordance with the State of Florida Department of Environmental Protection (DEP) Rules, Chapter 62-604 for Wastewater Facilities, with OSHA requirements and with the "Florida State Board Health Sewage Guide" and the recommendations of Chapter 12 of the ASCE Manual No. 37, "Sewer Design and Construction", except as otherwise provided herein. Wet wells shall be classified as hazardous areas, Class 1, Division 2, Group C.

2. In addition, pump stations shall be designed in accordance with the MD-WASD's "Supplemental Design Guidelines for Lift Stations and Force Mains" found in Appendix B. The MD-WASD's "Standard Pump Station Drawings", bound herein, are provided solely as an aid and shall not be considered as completed construction drawings.

3. Pump station shall be designed to serve no more than one quarter section. Also design shall incorporate corrosion inhibiting measures, practices and or products as found in the "Basic Guide to Corrosion Protection for Miami-Dade Water and Sewer Department Projects", found in Appendix D.

4. All applicable drawings of the MD-WASD's "Standard Details", found in PART IV herein, shall apply. Water service at pump stations shall be installed as shown in M-DWASD's Standard Pump Station Drawings.

B. STRUCTURE AND TYPE

1. Stations may be either precast or cast-in-place, installed by Caisson Method.

2. Stations shall be of reinforced concrete, and may be of the wet well-dry well type or submersible pumping station type, with depths no greater than 24 feet. The dry well shall maintain the cross-sectional area of the floor, up to ground level and shall be provided with an intermediate removable deck. Dry wells with entrance tubes shall not be approved.

3. Dry wells shall be close to square, in shape, with a minimum area of:
   64 sq. ft. - for stations of 50 horsepower per pump and below,
   100 sq. ft. - for stations of 60 to 75 horsepower per unit.
   In all cases, dimensions of dry well shall also be based on the size of the pumping equipment and appurtenances approved for installation therein.

4. Structural design shall conform with the requirements of the Florida Building Code and the American Concrete Institute "Building Code Requirements for Reinforced Concrete", ACI 318, latest edition. In order to provide strength, stability, and serviceability for sanitary structure under special loading conditions, the recommendations of ACI Committee 350 Report entitled "Concrete Sanitary Engineering Structures" (ACI 350) shall be used as a guide.

5. Wet-Well/Dry-well configuration shall be used when the station requires installation of pumps weighing more than 1,500 pounds.

6. Wet-wells may be constructed as an integral part of the dry-well or as a separate structure. Piping between separate wet-well and dry-well structures shall be provided with a flexible joint at the structure wall. There shall be at least four feet of separation between such structures. Wet-well operating capacity determination shall be based on pump cycling, not on a fixed determined wet-well effective volume. The method of determination shall be as specified in Section 3.4.3 of “Supplemental Design Guidelines for Pump Stations and Force Mains”.

C. ACCESS

1. Wet-well/dry-well pumping station: shall have separate outward opening access hatches for the-wet well and dry-well sized for the pump. Hatches shall be provided in accordance with Section 05540. Wet-well hatches shall have a minimum clear opening of 30 inches by 30 inches and shall be located directly above the influent pipe and the operating control tubing. Dry-well hatches shall have a minimum clear opening of 48-inches by 72-inches centered above the pumps. In no case shall dry-well opening be less than as recommended by pump manufacturer.

2. Submersible pumping station: shall have hatches designed for an H-20 live load and sized according to pump manufacturer's recommendations. [See Section 05540 and Plans entitled; “Typical Submersible Sewage Pumping Station].

D. PUMPING EQUIPMENT

1. For wet well-dry well stations furnish and install vertical, centrifugal sewage pumps, in accordance with Section 11210.

2. For submersible stations furnish and install submersible sewage pumps in accordance with Section 11205.

3. Each pumping unit shall be designed to pump the peak flow at the required head.

E. PIPING

1. Each pump suction line shall be sized for a maximum velocity of 5 feet per second at the rated peak flow. Provide a 90 degree flared elbow in the wet well and an isolation plug valve in the dry well, of a wet well-dry well type station. The plug valve shall be the same size as the suction piping. Provide a plug valve per pump in the valve vault of a submersible type station together with a further isolation plug valve just outside of the valve vault on the force main.

2. Discharge lines shall be provided with horizontally mounted check valves of the outside-lever and weight type and full size isolation plug valve. Discharge piping shall be sized for a maximum velocity of 6 feet per second at rated peak flow or a minimum of 6-inches in diameter, whichever is greater. Each pump discharge line shall be equipped with a petcock and pressure gage. The combined discharge line shall be equipped with a bronze tapping saddle with 1-inch plugged tap for installation of SCADA by MD-WASD.

3. All pipes and fittings furnished and installed shall be in accordance with Section 15060, "Pipe and Fittings".

4. Piping within the pumping station shall be flanged ductile iron pipe. Piping passing through concrete walls shall be provided with wall pipe or sleeves.

5. Fresh water and seal water pressure piping shall be copper. Seal water suction, drain and overflow piping shall be PVC. Small piping (including conduits), passing through concrete walls shall be provided with wall sleeves.

6. Valves 6-inches and larger shall be plug valves of the non-lubricated eccentric type with resilient faced plugs. Valves 2-inches and smaller shall be gate valves.

F. EMERGENCY PUMP CONNECTION

1. A connection to the discharge piping shall be provided for emergency pump-out of the wet well. It shall consist of necessary fittings, isolation plug valve, a ductile

iron or brass quick-connect male fitting and a dust cap with an air release petcock. A petcock for gage at discharge of force main shall be provided.

G. ELECTRICAL SERVICE

1. Coordinate with the power company early during the design stage. No booster or set-up transformer shall be permitted. Service shall be 3 phase, 208 or 480 volt, and adequate for the load served, but never smaller than the sizes indicated below:

SERVICE SIZE

Voltage	Pump Motor H.P.	AMP	THW Cu	Conduit
208	5 thru 10	110	# 3	1-1/2”
208	15 thru 25	200	# 3/0	2-1/2”
480	5 thru 15	70	# 3	1-1/2”
480	20 thru 50	200	# 3/0	2-1/2”
480	60 thru 75	250	250 MC	3”

2. Neutral and grounding conductors to be sized according to NEC and FBC.

H. STANDBY POWER

1. As shown on the Plans titled, “Typical Submersible Pumping Station (WASD Design Standard Update 2005)”, the MD-WASD will require, as a minimum, construction of a generator building, fuel tank pad and all interconnecting piping and conduits. MD-WASD may require actual provision and installation of the diesel generator, fuel tank and associated items dependent upon the criteria provided below in this subsection.

2. Stations Above 350 GPM Capacity: Stations that will a peak flow above 350 GPM shall require approval and installation of an emergency generator and fuel tank (Section 16420).

3. Stations at/or Below 350 GPM Capacity: May require stationary generator based on the area's need for uninterrupted service (i.e. hospitals, government centers, correctional institutions and similar facilities).

4. Unusually High Horsepower Motors: Which cannot be operated by portable generators shall require a stationary generator.

5. Special Cases:

a) The MD-WASD may, at its discretion, require portable generators at stations having unusual characteristics, or when an existing pump stations being upgraded above 350 GPM, or when an institution as described in Article 1.09-H.2, above, is added and no space exist for a permanent generator.

b) If the project will contribute less than 350 GPM, but the pump station is being designed to handle more than 350 GPM (PEAK) for the entire service area, no installation of emergency generator and fuel tank is required.

c) A pump station serving only one development and designed for peak flows of 150 GPM or more shall require installation of an emergency generator and fuel tank.

I. FIRE EXTINGUISHER

1. General: One fire extinguisher shall be wall mounted in the dry well on suitable brackets furnished by the manufacturer, bearing the mark of approval of Underwriter's Laboratory, Inc., and ratings conforming to NFPA No. 10, but not less than 3-A; 20-B:C. Fire extinguishers shall be of steel construction with red enamel finish, except the valves which shall be stainless steel or chromium-plated.

2. Dry Chemical Extinguishers: shall be rated for Class A, B and C fires, shall be ten (10) pound capacity, nitrogen operated and shall be steel with red enamel finish except valves which shall be stainless steel or chromium plated. Dry type extinguishers shall be Allenco, Badger-Powhatan, Larsen or approved equal.

3. Carbon Dioxide Extinguishers: shall be steel with red enamel finish, except valve and operator which shall be stainless steel or chromium-plated, Allenco Model 7400-10, Badgern-Powhatan or approved equal. Hose diffuser horns shall be non-metallic.

J. PANELBOARD & TRANSFORMER

A 100 amp single phase 120/240V breaker panelboard shall be provided to power all miscellaneous loads such as lights, seal water pump, air compressors, fans, sump pumps, dehumidifier, etc. If required, a dry type 480V-120/240V transformer wall mounted at the intermediate deck level shall be provided to feed all these loads. The transformer shall be sized to supply all of the connected load plus 30% of spare capacity.

K. STUCCO

Only the outside wall surfaces of the above-grade structure (to six inches below grade) shall be stuccoed. Materials shall conform to the Florida Building Code (latest edition).

L. LIGHTING

1. Provide LED indoor lighting with a minimum of 10 foot-candle power at the intermediate deck and at the lower level.

2. Where outdoor lighting is required provide LED wall-mounted fixture with photoelectric control.

3. Lighting fixtures shall be in accordance Section 16510.

M. ALARM SYSTEM

Provide an alarm system to give audible and visual alarms of pump station malfunction, in accordance with Section 16051.

N. AIR MOVING EQUIPMENT

All air moving equipment shall be in accordance with Section 15860.

O. INTERMEDIATE DECK

Provide an intermediate deck at an elevation with at least one-half foot clearance above the top of the motor, but never less than 7-foot clearance from floor slab. The deck shall be constructed of removable galvanized steel grating supported on galvanized steel channels. Grating shall be anchored to support frame channels. The channels shall be located such, that clear access is provided to the motors from the hatch opening when the grating is removed. Design in accordance with FBC and OSHA requirements.

P. LADDER

Provide a galvanized steel ladder from the hatch to the intermediate deck. It shall have extension rails which can be pulled up when the hatch is open. A second galvanized steel ladder shall be provided from the intermediate deck to the bottom floor. Ladders shall be in accordance with the requirements of the FBC and OSHA. A safety railing and stainless-steel chain shall also be provided around the opening in the intermediate deck for the bottom ladder.

Q. SURFACE PROTECTION - PAINTING

1. The inside walls of the dry well and all piping and equipment shall be properly primed and painted.

2. Paint material and specification requirements are shown in Section 09900.

R. SITE & LOCATION REQUIREMENTS

1. Stations shall be located on property of adequate size and said property shall be conveyed to the MD-WASD by fee simple title.

2. Location of pump stations shall be in accordance with local codes or governing authority having jurisdiction at the proposed site. In any case, a 25-feet long by 12-feet wide paved driveway, which shall provide access to all structures, wet well, dry well, valve pit, emergency generator and fuel tank, if required. Typical pump station site plans shall have a 45-feet by 65-feet format. A minimum separation of 5-feet shall be maintained between any proposed structure and a water or sewer main, and between two sewer

mains (edge to edge). Proposed rim elevations and final grade elevations shall be in compliance with DERM requirements.

3. Direct access shall be provided, without entering or crossing private property, by a paved driveway alongside the drywell and the wet-well for parking of maintenance trucks. The driveway shall be direct and clear from the roadway to the dry well / wet well. Control panels and emergency pump-out shall be located to permit clear access through driveway

4. Provide a chain link fence, in accordance with Section 02822, that will enclose the pump station property. The fence shall be 6-feet high minimum, with a 12-foot wide, minimum, double-leaf gate for the paved driveway. Barbed wire and extension arms may also be required in some locations.

5. Other types of property enclosures, such as block walls, may be substituted but shall require the prior approval of the MD-WASD.

6. Unpaved areas shall be completely sodded after construction is complete. Additional landscaping as required shall be incorporated in the Plans as set forth in Section 02900.

1.10 COMPLETED AS-BUILTS

A. The as-builts shall be completed and submitted to the Department at the time of system testing. Testing will not be considered complete until as-built record documents are submitted and approved by the Department. Completed finalized as-built package are required by the Department within 10-days upon the successful testing of all mains, equipment and appurtenances.

B. Complete topographic and boundary survey for the pump station shall be signed and signed and sealed by the Florida Licensed Professional Surveyor and Mapper as part of the as-built plans. All information required of a boundary survey shall be contained on the as-built plans to include the legal description of pump station site, easements and right-of-ways abutting the pump station site and location of all surface facilities recorded by a PSM. All utilities within pump station property shall be properly shown, along with their associated elevation and clearance.

C. The mechanical, structural and electrical information on as-builts for Pump Stations and Plant work shall be reviewed and signed and sealed by a Florida Registered Professional Engineer when designated as the responsible party for the corresponding portion of the as-builts. The Engineer shall verify that all mechanical, structural and electrical information on the as-built the work was constructed as designed on the Design Plans. Any deviation shall be noted and approved by the Department.

PART 2 - PRODUCTS

MDWASD
2.01 GENERAL

A. All material for use in the Project shall be new and of recent domestic manufacture and shall be the products of reliable manufacturers or suppliers who, unless otherwise specified, have been regularly engaged in the manufacture of such materials and equipment for at least five (5) years.

B. All fittings and components shall, wherever possible, be standard stock articles of well known manufacturers.

C. Where the Specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use, but, unless otherwise provided, articles or products of similar characteristics may be offered for the approval of the MD-WASD, after prior approval by the Engineer.

D. Copies of complete descriptive data shall be furnished regarding all material, consisting of dimension drawings, catalog references and other information necessary to clearly identify and evaluate each article.

E. Unless otherwise specified, all fabricated items, steel bolts, nuts washers and all other miscellaneous ferrous metal items (except cast iron and stainless steel) shall be hot-dip galvanized in accordance with ASTM A123, "Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products" and ASTM A153, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware". Where the word "galvanized" or its abbreviation is used on the Plans or in these Specifications, it shall mean hot-dip galvanized. Fabricated items shall be hot-dip galvanized after fabrication. Internal threads shall be tapped or re-tapped after galvanizing. All threaded fasteners together with their associated components, such as washers, located in the wet well shall be type 316 stainless steel.

F. Pumps, motors, electrical items and other station equipment shall be shipped, handled, stored and protected in accordance with Section 01600, "Materials and Equipment Shipping, Handling, Storage and Protection"

G. Any salvageable pipe, fitting, or other miscellaneous material or equipment, removed from the MD-WASD-owned mains during construction and not reused in the work shall be cleaned, hauled to and stored where directed by, and shall remain the property of the MD-WASD. All other material and equipment shall be disposed of by the Contractor at his expense.

H. To insure satisfactory and successful final painting of materials and equipment to be furnished, it is essential that the paints applied in the shop and in the field be mutually compatible. To this end, require that the shop paints applied to materials and equipment be compatible with the paints proposed for use in the field, or determine what shop paints have been used and select field paints compatible therewith, all as approved by the MD-WASD.

2.02 PUMPS

A. Submersible Pumps – See Section 11205 Submersible Pumps

B. Dry Well Centrifugal Sewage Pumps – See Section 11210 Vertical (Dry Pit) Centrifugal Pumps

C. Pump Warranty

1. Submersible Pumps: The pump manufacturer shall warrant the units supplied to the owner against defects in workmanship and materials for a period of 5 years or 10,000 hours of operation, in normal use, operation and service. The warranty shall be in printed form and shall apply to all similar units. A copy of the warranty shall be supplied with each pump. The warranty shall consist of the following: From 0 18 months or 0 - 3,000 hours, 100% warranty, From 19 39 months or 3,001 6,500 hours, 50% warranty, From 40 60 months or 6,501 10,000 hours, 25% warranty.
2. Centrifugal over 60 HP and under: Same as for submersible pumps.
3. Centrifugal over 60 HP: One year Warranty minimum. Project specific as required by the Engineer.

2.03 WET WELL

A. See Section 02536 Precast Manholes.

B. Concrete Protective Coatings: See WASD Pre-Approved Product List Sheet 10.7 Wet Well Coating.

C. Crystalline Waterproofing: Pump Station Wet Wells shall have Xypex/BASF Crystalline Waterproofing Admixture or approved equal, applied at 2 to 3% of the weight of portland cement in the wet well by volume. The Crystalline Waterproofing Admixture shall be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy. The precast concrete structure with the Crystalline Waterproofing Admixture is required to cure for 28 days prior to application of the concrete protective coating.

D. Water Cement Ratio: 0.34 for Pump Station Wet Wells

E. Reinforcement of Grade 60 bars. (Pump Station Wet Wells require rebars not wire mesh reinforcing).

F. Waterstops: Ribbed PVC Waterstop with centerbulb.

G. No construction joints will be allowed below an elevation of four feet above mean sea level. Construction joints will be allowed above elevation+4.0, if adequate keyways and waterstops, approved by the Department (Ribbed PVC waterstop with centerbulb), are provided. The Department may approve an alternate joint method in cases of excessively deeper and heavy structures.

2.04 CASTINGS

A. GENERAL

MDWASD

1. Material used in the manufacture of the castings shall conform to ASTM A48, "Gray Iron Castings", for Class 35B. Proof Loading: AASHTO M306 Loading

2. Castings shall be in compliance with Standard Details and Section 05550, "Castings".

B. MANHOLE FRAMES AND COVERS

Manhole covers and frames shall be MD-WASD Type "A" with roadway cover, U.S.F. Fabrication No. 310, or approved equal. The covers shall be cast labeled "SANITARY SEWER".

C. VALVE BOXES AND COVERS

Valve Boxes and Covers shall be MD-WASD No. 52 or No. 53 in accordance with the Standard Details appended hereto. Valve box covers shall be cast labeled with the letter "S".

2.05 BRICK

A. Concrete brick shall conform to ASTM Standard C55-01 "Concrete Building Brick". Clay brick shall be used in manhole construction. Clay brick shall conform to ASTM Standard C62-00, "Building Brick (Solid Masonry Units Made from Clay or Shale)".

B. Bricks shall have true edges and sharp corners and shall have been cured for at least 14 days before being placed.

2.05 CONCRETE, MORTAR AND GROUT

See Sections 03300, 04060 and 03600, respectively.

2.06 CONCRETE BLOCK

Unit masonry shall conform with Section 04220.

A. Standard units of concrete block shall conform to ASTM C90, "Hollow Load-Bearing Concrete Masonry Units", Normal Weight, Grade N-1, except that the maximum moisture content shall not exceed 50 percent of the total absorption.

B. Louvered concrete ventilator block shall conform to the FBC for materials and quality control. Louvered blocks shall be considered non-load bearing units requiring a reinforced concrete lintel above, when placed in standard concrete block construction. Size and reinforcement of the lintel shall be as required by the FBC, however, the lintel shall bear not less than 8 inches on the masonry at each end.

C. Louvered ventilator blocks shall be furnished in modular units 16 inches square nominal (15-1/2 inches by 15-1/2 inches actual), and each unit shall have four louvers.

D. A mortar groove shall be provided on the exterior of the frame, centered on the frame depth.

E. Each modular unit shall be provided with an insect screen. Fabrication shall be extruded aluminum frames, corners mitered aluminum spline, and 16-18 mesh aluminum screen. Screens shall be fixed type, with aluminum clips and screens suitable anchored to the unit.

2.07 ELECTRICAL MATERIALS

A. See Section 16051 "Pump Station Electrical Materials".
B. See Section 16940 "Pump Station Control Panel".

2.08 TELEMETRY

A. A telemetry panel provided by the MD-WASD shall be installed in the future. All appurtenances required by the telemetry system shall be provided, including antenna, concrete filled galvanized steel pipe, concrete base, mounting clamps and accessories.

B. All lift stations shall be designed for fully automatic unattended pump control with local override capability. Lift stations shall also be designed for remote monitoring capability. Provisions for these installations shall be made by Engineer of Record. Remote monitoring will be installed by the MD-WASD.

2.09 FENCING MATERIAL

Fencing material shall be furnished and installed in accordance with Section 02822, "Chainlink Fences and Gate". Gates shall be positioned to allow for maintenance and direct truck access to the wet well.

2.10 PIPING AND FITTING MATERIAL

Piping, fittings and appurtenances shall be as specified in Section 15060, "Piping and Fittings". Sewage lined ductile iron pipe and fittings are required within the pump station.

2.11 LADDERS & GUARD CHAINS

A. Galvanized steel ladders shall be fabricated with structural shapes in accordance with Section 05120, "Miscellaneous and Structural Steel", and shall be sized in accordance with the Plans. All welds shall be ground smooth and cleaned to remove welding marks. All screws and bolts appurtenant to the ladders shall be AISI Type 316 stainless steel.

B. Guards chains shall be used where shown on the Plans. The chains shall be welded stainless steel close link hoist chain 3/8-inch by 1.2 inch X .540 inch links. One end of each chain shall be attached by a stainless steel shackle to a 3/8-inch round stainless steel eye bolt through the pipe stanchion and the other end of each chain shall be connected to a heavy stainless steel snap hook. A 3/8-inch stainless steel

welded eye and concrete insert shall be provided in the wall for both chains. The eyes shall be installed just below the bottom of the top and intermediate rails. Stainless steel items shall be AISI Type 316.

2.12 All other material required for the satisfactory installation of the pump station, including valves, sewage pumps, sump pump, steel reinforcing, structural steel, waterstops, miscellaneous material and other products, shall be as specified elsewhere herein.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

A. The precast base shall be set level, with the walls plumb on the graded crushed rock bedding.

B. Excavation shall extend to a level 12-inches below the level of the outside bottom of the base slab. If necessary, provide sheeting and shoring for the excavation. Sheeting and shoring may be required in order to control the excavation dimensions, protect the workmen, and prevent damage to the structure or other adjacent facilities. The resulting excavation shall be backfilled with drainfield limerock or specified pipe bedding material to a level to receive the structures at the proper elevation.

C. Necessary sheeting and shoring shall be designed by a Registered Professional Engineer licensed to practice in the State of Florida. Signed, sealed, and dated drawings and design calculations shall be submitted to the Engineer for approval prior to construction.

D. The excavation shall then be brought to the structure's bottom elevation by placing and compacting 6-inch layers of Oolitic limerock to 95% of maximum density as determined by AASHTO Specification No. T-180. Excess excavated material, suitable for the purpose, may be used later as backfill around the structure. The wet well, dry well and/or valve pit shall be painted prior to installation. Backfill around new structures up to the pavement base or surface of the ground shall be material not exceeding 6-inches in diameter and shall be compacted in layers not exceeding 9-inches. Each layer shall be compacted with a powered hand tamper or other approved method.

E. For surfaces of structures exposed to view the Contractor shall fill all depressions and all air holes with mortar, dampen surfaces, and then spread slurry, consisting of one part cement and one and one-half parts sand, by damp loose volume, on the surface with clean burlap pads and sponge rubber floats. The Contractor shall remove any surplus by scraping and hen rubbing with clean burlap. Finish surface shall be suitable to receive paint.

3.02 INSTALLATION OF PRECAST PUMP STATION

A. Excavations for the cast-in-place or the precast structures shall be extended to a level 6-inches below the level of the outside bottom of the slab. Sheeting and shoring may be required in order to control the excavation dimensions, protect workmen, and prevent damage to the structure or adjacent facilities. The resulting excavation shall be backfilled with drainfield limerock or specified pipe bedding material to a level to receive the structures at the proper elevation. Pump station exteriors shall be painted prior to installation.

B. Sheeting and shoring for the pump station shall be designed by a Registered Professional Engineer licensed to practice in the State of Florida. Signed, sealed and dated drawings and design calculations shall be submitted to the MD-WASD for approval prior to construction.

C. The pump station shall come with an anchor slab, precast to the dimensions shown on the Plans to be lowered in to the excavation separately, or as a complete unit. The structure, with anchor slab shall be securely seated.

3.03 INSTALLATION OF VALVE PIT STRUCTURES

A. During all backfilling operations the backfill level shall be kept even on all sides of the structure and the Contractor shall exercise every precaution to prevent damage to, or unplanned loading of, the structure or its appurtenances.

B. The valve pit structure shall be precast to the dimensions shown on the plans and carefully lowered into the excavation. The structure shall be seated securely to grade and to the approval of the MD-WASD, after which the Contractor shall complete the remainder of the installations.

C. After satisfactory installation and testing, the valve pit interior shall be painted as specified.

3.04 MECHANICAL WORK

A. The mechanical work shall be performed by personnel who have had previous experience installing similar pumping station equipment. All equipment shall be installed in complete accordance with the installation instructions pertaining to the various items of equipment as published by the equipment manufacturers and no piece of equipment shall be installed unless its installation instructions are on hand. Duplicate copies of these instructions shall be furnished to the Engineer of Record prior to installation. Before any installation work is started, the Contractor shall submit five copies of installation drawings to the MD-WASD for approval of all the proposed mechanical work. No work shall commence until approval of the installation drawings has been received.

B. All pipe, tubing, and fittings shall be adequately supported with adjustable pipe saddle supports, by wall brackets, or by ceiling hangers, as indicated on the drawings. Except as otherwise indicated or specified, all piping passing through walls or floors shall be provided with pipe sleeves or wall pipe as indicated on the Plans. Sleeves shall be caulked to piping on both sides of wall with Dow-Corning

790 joint sealant or approved equal. Sleeves and wall pipe shall be accurately set in the forms and blocked to prevent movement during pouring of concrete. Sleeves and wall pipe for piping 6 inches and larger shall be made of cast iron. Sleeves for piping smaller than 6 inches shall be cut from Schedule 40 galvanized steel pipe, reamed and set flush with both faces of wall or floor, or as shown on the Plans.

C. All pipe shall be thoroughly cleaned internally to the satisfaction of the MD-WASD before installation.

D. All pipe work under this Contract including handling of materials, excavation, laying, blocking, alignment and grade, jointing, setting valves and fittings, and anchoring, shall meet the applicable provisions of AWWA Specification C600, "Installation of Ductile-Iron Water Mains and Their Appurtenances", latest edition, as modified herein.

E. The Contractor shall furnish all nuts, bolts, washers, gaskets, foundation bolts, and all other items necessary to install the equipment specified herein. Foundation bolts shall be of a size recommended by the manufacturer of the equipment. All nuts, bolts, foundation bolts, and washers shall be hot-dip galvanized steel or stainless steel, as specified herein, or shown on the Plans.

F. Equipment shall be installed in a neat workmanlike manner in accordance with accepted practices. Alignment of pumping equipment shall be by a qualified millwright. Foundations and supports for equipment shall be poured to within one inch from finished elevation. The floor shall be thoroughly roughened by chipping where supports, foundations or bases are to be poured. Foundation bolts shall be located by templates which shall be left in place during the pouring of the concrete. The equipment shall be set and shimmed with steel wedges to the required finished elevation. The foundations shall be encircled by forms and the equipment grouted in, using epoxy grout, as specified herein. Rodding or other suitable means shall be used to assure that all voids have been filled. After the grout has set, the shims shall be removed and the resulting spaces filled with grout. After setting, this grout shall be trimmed to match the adjoining grouted surfaces. The matching surfaces of the grout and foundation on all pumps shall be rubbed with a carborundum brick to produce a smooth, even finish, satisfactory to the MD-WASD. Exposed corners shall be chamfered 1 inch.

G. The pumps and motors shall be placed in position and shall be perfectly aligned in accordance with the recommendations of the pump manufacturer, and to the satisfaction of the MD-WASD. Bolts shall then be tightened, and the alignment shall be rechecked. Alignment and checking shall be done in the presence of a MD-WASD representative.

3.05 STRUCTURAL WORK

A. All concrete work shall be constructed in accordance with all applicable provisions of Section 03300.

B. If, in performing the concrete work hereunder, the forms holding the concrete should fail, sag or get out of line in any way whatsoever, repair such damage to the

complete satisfaction of the Engineer. All completed members shall be straight and true, and present a uniform appearance. The use of excavation walls as forms will not be approved.

C. Concrete surfaces shall be inspected immediately after the forms are removed. Defective areas shall be chipped away to the depth of the imperfections but not less than one inch deep. These areas shall be kept wet for at least two hours before patching. Immediately thereafter, all the holes shall be brushed neat with cement grout. While the grout is still wet, the holes shall be filled with a barely moist grout consisting of one part Portland cement and three parts sand, which shall be driven tight with wooden caulking tools and finished off flush and smooth. The mortar patches shall be cured as specified.

D. The dry well floor and valve pit floor shall slope one inch from the farthest point to the sump.

E. Construct the foundations for the pumps and motors with non-shrink epoxy grout. The foundation shall include anchor bolts, nuts, washers, and sleeves as required for the equipment. Anchor bolts shall be in accordance with the equipment manufacturer's recommendations and as approved by the MD-WASD. The foundations shall be poured to heights of not less than one inch below the elevation required to bring the equipment to the correct elevation, leaving room for placing grout to maintain the equipment at the proper elevation. After the forms have been removed, the foundations above the floor line shall be rubbed smooth with a carborundum brick. Exposed corners shall be chamfered 1-inch. Anchor bolts, nuts, washers, and sleeves shall be hot dip galvanized.

F. The Contractor shall construct concrete foundations for the check valves, including felt paper lining. Foundation and supports shall be allowed to cure for at least 7 days before setting any equipment. The floor shall be thoroughly roughened by chipping where supports are to be poured. After the forms have been removed, the foundations above the floor line shall be rubbed smooth with a carborundum brick. Exposed corners shall be chamfered 1 inch.

3.06 ACCEPTANCE TESTING

A. The Contractor shall inform the City in writing that the station is ready for operation, and shall, in the presence of the City's representative, demonstrate the operability and correct adjustment of every device included in the Project. The Contractor shall furnish all gauges, testing devices, water to fill (and refill as required) the wet well, electric power, labor, and other necessities to demonstrate that the station is ready to be put into operation. All tests and/or demonstrations shall be conducted to the complete satisfaction of the City.

B. Testing of the different items of equipment shall be conducted as many times, and for as long as is necessary, to determine whether the various items meet Specifications. Discharge piping shall be tested for leaks under pump shut-off head condition. No leakage is allowed. All interior ductile iron piping except the pump-

suction piping shall be tested and made "drop-tight" under a hydrostatic test pressure of at least 100 psi. Sections of discharge piping which cannot be isolated by valving for full pressure tests shall be tested at system pressure with no leakage allowed. Pump suction piping and valves shall be made "drop-tight" when the wet well is flooded to the invert level of the gravity line entering the wet well.

C. The Pump Station shall be tested per pump manufacturer's recommendations, WASD Standards for Submersible/Centrifugal Pumps and in the manner described below:

1. Fill wet well with water.
2. For pump number one:
   - Check winding resistance and record readings.
   - Place the operating mode selector switch in the manual position.
   - Record voltage and amperages.
   - Take pump down time and document it.
3. For all subsequent pumps follow steps 1 and 2.
4. With water level below lead pump starting point place all pumps selector switch to automatic position and continue adding water to wet well as necessary.
5. Observe lead pump run.
6. Increase water flow into wet well for lag pumps to run.
7. Continue this process for all pumps.
8. Stop pouring water into wet well and observe as all pumps shut off at the pre-selected levels.
9. Return selector switch to the off position.
10. Allow well to fill up to verify that High level alarm is functioning.
11. Again, pump down well in manual operation until low alarm level is triggered but
12. before pump looses prime.
13. Disconnect Digital Level Controller and check that lead pump is turned "on" and "off" at the proper levels by Back-up controller operating with float switches.
14. If the above parts of the test show that any component is not operating as intended, make necessary adjustments and/or repairs and repeat steps one through thirteen, until the entire system operates trouble free.
15. Fill the wet well with water to the invert of the influent pipe. Leave it full of water for at least two hours. If the water level goes down, locate and repair the leak to the satisfaction of the Engineer. Repeat test to ensure absence of leaks.

END OF SECTION

SECTION 02615

CONCRETE PROTECTIVE LINER SYSTEM FOR PRECAST STRUCTURES

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Furnish and install all labor, materials, equipment, and incidentals required to supply polypropylene, random copolymer (PP-R) concrete protective liner in the precast wet wells and manholes as required and as shown on the plans. The liner system shall be AGRU "Sure-Grip" PP-R Concrete Protective Liner, or approved equal polypropylene lining, as installed by U.S. Precast Corporation, Miami, Florida and Joelson-Taylor Concrete Products at Venice, FL, Deland, FL and other locations in this state.

B. PP-R concrete protective liner shall be designed and installed by the manufacturer of the precast structure to protect the structure's interior surfaces from chemical attack and microbial corrosion, and to facilitate the prevention of ground water infiltration. A watertight seal between the ring and cover, or access hatch, and the liner, must be incorporated into the design. Additionally, the liner must be sealed at the bottom of the concrete structure's wall with a waterstop assembly thermo-welded to the wall liner, or with continuous liner coverage over the top of the base slab. All construction joints must be sealed by extrusion welding the liner seams together to form a continuous and flexible seal between structure sections.

1.02 SUBMITALS

A. The contractor shall submit for review a detailed CAD shopdrawings for each type of structure to be used on the project. These drawings shall detail the precast structure, per the design specified for the project, and shall show the concrete protective liner's placement on the structure's interior wall surfaces, at the construction joints, at pipe and other conduit connections, and at the adjustment area between the precast structure and the ring and cover. A manhole frame sealing system, in accordance with Section 02620, may be used in lieu of liner at the adjustment area.

B. The contractor shall provide, upon request, detailed thermo-welding and weld testing procedures, and supply to the engineer, upon request, a copy of the liner manufacturer's certification of training for those personnel performing the welding.

PART 2 - PRODUCTS

2.01 PHYSICAL PROPERTIES

A. The PP-R liner shall be free of pores, pinholes, voids and foreign bodies. All anchoring studs shall be manufactured during the extrusion process in one piece with the sheet. No welding to attach the studs to the sheet or mechanical finishing work is permitted. All welding rod, profile strips, cap strips and polyester backed transition wrapping shall be manufactured from

the same resins by the same manufacturer. The liner manufacturer shall be ISO 9001 certified.

B. The characteristic values of the raw materials shall be as follows:

PROPERTY	TEST METHOD	UNIT	STD. VALUE
Density	ASTM D 792-86	G/cm^3	.898
Melt Flow Index	ASTM D 1238-88	G/10min	(190/5)
Heat Reversion	ASTM D 1637-83	%	< 2
Yield Stress	ASTM D 638-89	PSI	$\geq$ 2,900
Elongation of Yield	ASTM D 638-89	%	$\geq$ 10
Elongation at Break	ASTM D 638-89	%	$\geq$ 50
Fire Classification	UL 94		V2
Electric Conductivity			10^{13}
Resistance to Pull-Out	SKZ Test Directives	T/m^2 T/ft^2	30 3
Maximum Working Temperature		C. F.	90 degrees C. 194 degrees F.

2.02 CONFIGURATION

A. Studded PP-R liner sheets shall have a minimum design thickness of 2 mm (.079 inches) and have a minimum of 39 wedge shaped anchoring studs per square foot of liner. Minimum stud height shall be no less than 9 mm (.39 inches) with a minimum length of 14 mm (.55 inches). Anchoring studs must be capable of resisting continuous hydraulic backpressure, to a minimum of 40 feet of hydraulic backpressure, exerted between the interior wall of the concrete structure and the anchoring stud side of the protective liner.

B. Non-studded PP-R cap strips, used to bridge construction joints, shall have a minimum design thickness of 2 mm (.079 inches). Polyester backed non-studded PP-R transition sheets, used for the purpose of bonding PP-R to dissimilar materials, shall be attached to the PP-R sheet during the extrusion process.

C. The lining system shall be designed to be repaired, or modified, at any time during the design life of the system.

PART 3 - EXECUTION

3.01 INSTALLATION

A. The installation of the PP-R concrete protective liner into precast wet wells and manholes shall be accomplished only by a precast concrete manufacturer certified by the liner manufacture, with a minimum of five years of manufacturing experience, and a minimum of five years experience in the installation of corrosion resistant thermoplastic sheet liners in concrete structures. Upon request, the liner installer shall provide written certification that the installation is in accordance with the liner manufacturer's installation specifications.

B. Placement of the liner on forms shall conform to the liner manufacturer's written instructions. All shop and field welding shall be performed only by thermoplastic extrusion welders certified by the liner manufacturer. All field thermo-welding shall additionally be performed only by confined space trained, and certified personnel.

- END OF SECTION -

SECTION 02625

SANITARY SEWER MANHOLE INFILTRATION INSERT

PART 1 - GENERAL

1.01 SCOPE

. This section specifies sanitary sewer manhole infiltration inserts. Manhole inserts shall be furnished and installed in all new sanitary sewer manholes and all manholes to be rehabilitated as part of the Project.

PART 2 - PRODUCTS

2.01 GENERAL

The manhole infiltration inserts furnished shall be the product of firms which have been regularly engaged in the manufacture of such items for a period of at least five (5) years.

2.02 MATERIAL

A. All materials used in the manufacture of the infiltration inserts shall be highly resistant to corrosion from sanitary sewer atmospheres containing hydrogen sulfide and dilute sulfuric acid.

B. Infiltration insert body shall be manufactured of High Density Polyethylene meeting the requirements of American Society for Testing and Materials Standard D1248-84 (Reapproved 1989), APolyethylene Plastics Molding and Extrusion Materials@, Type III, Class A, Category 5 or stainless steel, when required by the Department.

C. Insert body thickness shall be a minimum of .125 inches. Inflow dish shall be one piece molded with structural ribbing members in the bowl area for extra structural integrity. Inflow dish is to have smooth radius molded edges for additional strength and prevention of cracking. The insert shall have a straight-side design to allow penetration of the manhole lid dropping through the clear opening of the manhole frame. The depth of the infiltration insert shall be a minimum of 5 inches from the smooth radius molded edge to the center of the bowl area. The insert shall be designed to provide a sufficiently loose fit into the manhole frame to allow easy removal. Manufacturers name and the date manufactured shall be molded into the inflow dish.

D. The infiltration inserts shall be dimensioned to fit sanitary sewer manholes as shown on the Miami Dade Water and Sewer Departments Standard Detail #SS4.0, “Type “A” Manhole cover and Frame” pages 1 and 2 of 2.

E. The gasket shall be a minimum of .5 inches wide and shall be a minimum thickness of .125 inches installed by the manufacturer and shall be envelope type, providing a seal on the lower side of that portion of the insert, which sits in the manhole frame. The gasket shall be closed cell Neoprene rubber and shall provide a watertight seal when installed. The gasket

shall be permanently attached to the insert by means of chemical bonding, (or waterproof adhesive). The maximum amount of leakage through the infiltration insert shall be five (5) gallons in twenty-four (24) hours.

F. Ventilation is provided by a vent hole on the side of the bowl.

G. A handle made of nylon webbing no less than one (1) inch wide, shall be located so that it does not interfere with the installation of the manhole lid, yet still provide for easy removal of the infiltration insert. Corrosion resistant fasteners shall be used to fasten the nylon webbing to the inflow dish. The handle shall be able to withstand a pull of at least 500 pounds before failure or separation from the insert body.

H. Bidders may be required to submit a sample inflow dish along with a complete detailed specification and certifications referenced in this document for evaluation.

I. The County reserves the right to perform its own testing procedures or to send any and all samples to any laboratory for analysis. On the basis of this testing and analysis, the County shall be the sole judge of the acceptability of the sample in conformance with the specifications and its decision will be final. Any sample submitted shall create an express warranty that the whole of the goods to be provided by the contractor shall conform to the sample submitted.

J. Five (5) year warranty against defects.

K. Insert shall be an “Inflow Defender” by USSI, LLC; Venice, FL; (941) 926-2646 or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Inserts shall be installed in accordance with the manufacturer recommendations.

B. The Department reserves the right to require installation of stainless steel inserts, as required.

C. Manhole frame shall be set so that the tops of the covers are flush with the adjoining pavement or ground surface.

- END OF SECTION -

SECTION 02822

CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.01 WORK INCLUDED

A. The work included in this Section consists of furnishing and installing a galvanized steel chain link fence, complete with gates and "V" arms with barbed wire, where permitted, to be constructed as shown on the Plans.

B. Minimum fence height shall be six (6) feet, with a double leaf entry gate having a minimum ten foot clear opening; except that if building and zoning codes permit, the fence and gate height shall be eight (8) feet.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Fabric:

The chain-link fence fabric shall meet the requirements of ASTM Standard A392, "Zinc-Coated Steel Chain-Link Fence Fabric", latest edition. Zinc coating of the fabric shall be not less than 2 ounces per square foot of wire surface (Class 2 coating). Fabric shall be one-piece fabric height as shown on the Plans, with 2-inch by 2-inch mesh of No. 9 gauge wire, unless otherwise specified. Top and bottom selvages shall be twisted. The fence shall have a single strand of 7 gage galvanized coil spring wire at the bottom, fastened at each post, and at 2 foot centers, with hog rings, extending to within 1-inch of the ground.

B. Posts and Other Appurtenances:

All tubular members including gate members shall comply with ASTM Standard A 53-90b, "Pipe, Steel, Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless, for Ordinary Uses", Type S Grade A or B, and shall be plain-end steel pipe, with zinc coating applied inside and out by the hot-dip process. Zinc coating shall be not less than 1.8 ounces per square foot of pipe area. Gate frames shall be hot-dip galvanized after fabrication. All fence posts shall have weather proof caps which shall conform with the specifications detailed elsewhere in this section. Fence components shall be as follows:

Components	Nominal Pipe Size	Outside Diameter	Weight Per Foot
Top rail and braces	1 1/4 inches	1.660 inches	2.27 pounds
Gate frames	1 ½ inches	1.900 inches	2.72 pounds
Line posts	2 inches	2.375 inches	3.65 pounds
Corner posts	2 ½ inches	2.875 inches	5.79 pounds
Gate posts (less Than 10 ft. leaf)	3 inches	3.500 inches	7.56 pounds
Gate posts (greater than 12 ft. leaf)	6 inches	6.625 inches	18.97 pounds

C. Top Rail: The top rail shall be provided with couplings approximately every 20 feet. Couplings are to be the outside sleeve type, at least 6 inches long.

D. Concrete: Concrete shall have a minimum compressive strength of 3,000 psi at 28 days.

E. Barbed Wire: Where permitted by building and zoning codes, the fence shall have six strands of barbed wire mounted on "V" arm post top extensions, as shown on the Plans. Barbed wire shall meet the requirements of ASTM Standard A121, "Zinc-Coated (Galvanized) Steel Barbed Wire", latest edition, for wire gage No. 12-1/2 (2 strands) with a minimum zinc coating of 0.5 ounce per square foot of wire surface (Class 2 coating), applied before fabrication. The individual barb shall be four points, twisted around both wires, with the barbs spaced no more than 5 inches apart.

F. Gates:

1. The gate frames shall be assembled by welding and shall be hot-dip galvanized after fabrication. The gate shall be installed complete with all hardware, including hinges, locking devices, drop bars, center stops, holdbacks and other items, as required. Padlock will be furnished by the Department.

2. The gate frame shall be made of 1-1/2 inch diameter Schedule 40 pipe and shall be welded at all corners so as to form a rigid one piece unit for each leaf. Fabric shall be securely stretched and held in the center of the tubing by use of hooks, bolts and tension rods on all four sides of the gate opening frame.

3. If permitted, the gate shall have three strands of barbed wire mounted on frame top extensions and barbed wire shall be as specified above.

4. Gates shall have a center stop and drop rod with padlock hardware and padlock. Gate stops and latches shall all be hot-dip galvanized.

5. Gate post shall be equipped with caps designed to exclude moisture from the post.

6. Gate posts shall be equipped with caps designed to exclude moisture from the post.

G. Accessories: Miscellaneous hardware shall be of steel, malleable iron or ductile iron of standard design and conform to the requirements of the Chain Line Fence Manufacturer's Institute. All parts shall be galvanized except ties and clips may be of aluminum. The Contractor shall install all of the hardware necessary for a complete and working installation, and shall include the following:

1. "V" Arms or Single Arm Post Extensions for Barbed Wire:

Barbed wire supporting arms shall form an angle of approximately 45 degrees with the vertical fence and be fitted for attaching three strands of barbed wire. The top wire shall project approximately 12-inches horizontally from the fence line. The other wires shall be spaced uniformly between the top of the fence

fabric and the outside strand. The barbed wire supporting arm shall be manufactured from pressed steel or malleable iron capable of withstanding 200 pounds applied at outer strand of barbed wire. It shall be designed as a combination weather-tight closure cap and a barbed wire supporting arm, where barbed wire is required.

2. Padlocking Device shall be a fulcrum type latch assembly for double gates.

3. Post Caps shall be of cast steel or cast iron and shall be designed to provide a drive fit over the top of the post to exclude moisture.

4. Tension Bars shall be one piece for the fence height of the fabric with a minimum cross-section of 3/16" x 3/4". Provide one tension bar for each end post, and 2 for each corner and pull post. The gate shall have tension bars as shown on the Plans.

H. Tension bars, the tension bar bands, post caps, V-arms, brace rods, top rail clamps, turnbuckles, nuts and bolts, all gate hardware and remaining accessories shall be zinc coated in accordance with the ASTM Standard A153 "Zinc Coating (Hot Dip) On Iron and Steel Hardware", latest edition.

I. Hardware: Miscellaneous hardware shall be of steel, malleable iron or ductile iron of standard design and conform to the requirements of the Chain Link Fence Manufacturer's Institute. All parts shall be galvanized except ties and clips, which may be aluminum.

PART 3 - EXECUTION

3.01 ARRANGEMENT

A. Posts: Post shall be uniformly spaced, not to exceed 10-feet on centers. Intermediate post shall have waterproof tops which have integrally cast openings through which the top rails shall pass.. Terminal posts shall consist of one end, corner and pull posts.

B. Braces: Braces shall be provided at each gate, corner, pull and end post.

C. Ties and Clips: Fabric shall be fastened to all intermediate posts with 9 gauge tie wires, spacing not to exceed 14-inches apart. Fabric shall be tied to top rail with 9 gauge tie wires, spacing not to exceed 24-inches on centers.

3.02 INSTALLATION

A. All posts shall be installed in accordance with ASTM F567, "Practice for Installation of Chain Link Fence", latest edition. Where conflict between said standard and these specifications exists, the more stringent shall apply.

B. Post Setting: Line posts shall be set in holes 12 inches in diameter, 38 inches deep with 36-inch post embedment. Terminal posts shall be set in holes 15 inches in diameter, 38 inches deep with 36-inch post embedment. Gate posts for double swing gates shall be set in holes 18 inches in diameter, 38 inches deep with 36-inch post

embedment. Gate posts for single swing gates shall be set in holes 15 inches in diameter, 38 inches deep with 36-inch post embedment. After the post has been set and plumbed, the hole shall be filled with concrete. The exposed surface of the concrete shall be crowned to shed water.

C. Terminal and Gate Posts: Terminal and gate posts shall be set as specified above and shall be braced to the nearest post with a galvanized horizontal brace used as a compression member and a galvanized 3/8-inch steel truss rod and truss tightener used as a tension member.

D. Fabric: Fabric shall not be stretched until concrete footings have cured a minimum of three days. Chain link fabric shall be placed on the side designated by the Engineer of Record and shall be stretched taut approximately 1-inches above finish grade and securely fastened to all posts. Rolls of wire fabric shall be joined by weaving a single strand into the ends of the rolls to form a continuous mesh.

END OF SECTION

SECTION 05540

ACCESS HATCHES

PART 1 - GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish and install access hatches, frames and accessories, where shown on the Drawings, and as specified herein.

1.02 QUALITY ASSURANCE

A. Codes: Access hatches shall conform with South Florida Building Code and OSHA requirements.

B. Manufacturer: Company specializing in manufacturing products specified in this section with minimum five years documented experience.

PART 2 - PRODUCTS

2.01 HATCHES

A. General:

1. Hatches for valve vault shall be aluminum when outside of the right-of-way and shall be steel when in public right-of-way. In all cases hatches shall be double door type designed for AASHTO H-20 wheel loads.

2. The access hatches shall have spring loaded covers for easy opening, recessed padlock and automatic 90-degree hold-open arms. Hatches shall be equipped with a flush drop handle which does not protrude above the cover. Hinges shall be all stainless steel with tamper proof stainless steel bolts and nuts, and shall be removable for maintenance after the access hatch is cast in place. Access hatches shall be furnished with a safety chain (double door leaf design). Access hatch shall have a stainless steel slamlock with removable outside handle and fixed inside release handle and shall be equipped with stainless steel compression springs.

3. When mounted, door leaf shall be flush with the top surface of the frame, with the exception of the projecting lugs. Hatches shall be of skid proof design.

4. Hardware shall be AISI Type 316 stainless steel. Aluminum used in the construction of the access hatches shall conform to Section 05140.

B. Valve Vault:

Valve vault hatch shall be Type AHD as manufactured by U.S.F. Fabrication, Inc., Hialeah, Florida, modified as specified herein, or approved equal.

C. For Submersible Pump Type Pump Stations:

1. Access hatches shall be U.S.F.F. Inc. Type AHD aluminum double door designed for AASHTO H-20 wheel loads, modified as specified herein, or approved equal.

2. Frame shall be furnished with upper guide holder, level sensors cable holder and stainless steel compression springs. Frame shall be securely placed and mounted above the pumps.

3. The access hatches shall have spring loaded covers for easy opening, keyed lock and automatic 90-degree hold-open arms. It shall be equipped with recessed lock and a flush drop handle which does not protrude above the cover. Hinges shall be all stainless steel with tamper proof stainless steel bolts and nuts, and shall be removable for maintenance after the access hatch is cast in place.

D. For Wet Well/Dry Well Type Pump Stations:

1. Access hatches shall be U.S.F.F. Inc. Type THD double door for the dry well and Type AHD single door for the wet well designed for AASHTO H-20 wheel loads, modified as specified herein, or approved equal.

2. Frame shall be furnished with stainless steel compression springs.

3. The access hatches shall have spring loaded covers for easy opening, keyed lock and automatic 90-degree hold-open arms. It shall be equipped with recessed lock and a flush drop handle which does not protrude above the cover. Hinges shall be all stainless steel with tamper proof stainless steel bolts and nuts, and shall be removable for maintenance after the access hatch is cast in place.

4. Frames shall be 1/4-inch thick minimum extruded aluminum with mitered and welded corners, and with strap anchors bolted or welded to the frame for embedment into the concrete slab. Frame depth shall be at least 2-1/2 inches below the horizontal top surface of the hatch doors. The exterior portion of the frames which will be in contact with the concrete, and the strap anchors, shall be painted with a factory applied bituminous coating. Run PVC pipe drain from frame to sump in dry-well.

PART 3 - EXECUTION

(Not Used)

END OF SECTION

SECTION 11205

SUBMERSIBLE (WASTEWATER) PUMPS

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install submersible non-clog wastewater pumps and appurtenances and place in satisfactory operation, in a workmanlike manner, all machinery, equipment, apparatus and accessories required for a complete installation in accordance with these specifications.

B. It is the intent of these Specifications to obtain complete and operable equipment. All items and accessories appearing in the Drawings, in the manufacturer's literature as standard, and all items specified herein, shall be included. Items not included herein or on the Drawings or manufacturer's literature, but which can be reasonably inferred as necessary for the equipment to be properly and legally operable, shall be included.

1.02 REFERENCES

A. This section contains references to the following documents. They are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

1.	ABMA 9-90	Load Ratings and Fatigue Life for Ball Bearings
2.	ABMA 11-90	Load Ratings and Fatigue Life for Roller Bearings
3.	ASTM A48-00	Gray Iron Castings
4.	ASTM A108-99	Steel Bars, Carbon, Cold Finished, Standard Quality
5.	ASTM A276-00a	Stainless and Heat-Resistant Steel Bars and Shapes
6.	ASTM A278-93	Gray Iron Castings for Pressure Containing Parts for Temperature up to 650 Degrees F
7.	ASTM A322-91	Steel Bars, Alloy, Standard Grades (1996)
8.	ASTM A576-90b	Steel Bars, Carbon, Hot Wrought, Special Quality (2000)
9.	ASTM A743/A743M-98a	Castings, Iron-Chromium, Iron-Chromium-

		Nickel, Corrosion-Resistances for General Application
	10. Hydraulic Institute	Standards of the Hydraulic Institute, (Current Edition)

1.03 SUBMITTALS

A. The Contractor shall submit the following after approval of drawings, but prior to construction of pump station:

1. Pump Drawings.
2. Pump performance curves, including other impeller sizes.
3. Predicted pump performance curves for each condition point specified in Part 2 showing head, power, efficiency and NPSH required on the ordinate plotted against capacity on the abscissa (x-axis).
4. Materials of construction.
5. Motor drawings
6. Complete electric motor data.

B. Submit in accordance with Section 01340, "Shop Drawings."

1.04 QUALITY ASSURANCE

A. Pumping units and accessories shall be the standard product of manufacturers which have produced and sold such pumps and appurtenances for a period of at least 5 years for similar service.

B. Spare parts shall be available from the manufacturer, not the vendor. All mounting, guides, and spare parts shall be supplied by the manufacturer.

C. The Department has identified area with ragging and clogging problems which require the use of submersible pumps that have been field tested in the Department’s system. The Department Approved Pumps in areas with rags and wipes issues shall have cutters or other features to successfully operate at the location with the severe clogging problems. Coordinate with the Department Engineer if the proposed pump is located at a severe clogging location.

D. Pump Materials of Construction: Any pumps submitted as an alternate shall meet the design curve and material construction of the specified pump to the satisfaction of the Engineer. Any submitted alternate shall be reviewed to verify that the Department will receive the same quality of grade of steel, epoxy coating, mating to the discharge elbow and resistance to corrosion.

1.05 PUMP WARRANTY

A. The pump manufacturer shall warrant the units supplied to the owner against defects in workmanship and materials for a period of 5 years or 10,000 hours of operation, in normal use, operation and service. The warranty shall be in printed form and shall apply to all similar units. A copy of the warranty shall be supplied

with each pump. The warranty shall consist of the following:

1. From 0 18 months or 0 - 3,000 hours, 100% warranty.
2. From 19 39 months or 3,001 6,500 hours, 50% warranty.
3. From 40 60 months or 6,501 10,000 hours, 25% warranty.

PART 2 PRODUCTS

2.01 PUMPS

A. Pump shall be totally submersible, non-clogging, electrically operated, designed specifically for use in municipal wastewater applications and capable of handling raw unscreened sewage. Pumping units shall be suitable for the allotted space shown on the Drawings and shall be satisfactorily suitable for the design conditions as determined by the City. Pump stations will be located in an area where clogging of pumps by debris in the sewer is expected. The proposed pumps shall be capable of passing debris without clogging (to the satisfaction of the Engineer).

B. Source: Provide pumping units by one of the following submersible pumps approved for use in the Water and Sewer Department system:

1. Xylem/Flygt;
2. ABS, with contra-block impeller;
3. Grundfos.

C. Design: The design shall be such that the pump unit shall be automatically and firmly connected to the discharge piping when lowered into place on its mating discharge connection. The pump shall be so designed that it may be lowered to or raised from its place in the wet-well by Type 316 stainless steel chain or cable and accurately guided by pipe guide bars extending from the top of the station to the discharge connection. The pump shall be guided by no less than two (2) separate Type 316 stainless steel guide rails of 2-inch minimum diameter for pumps of 29 or less horsepower; 3-inch minimum diameter for pumps between 30 and 100 horsepower and of 4-inch minimum diameter for pumps over 100 horsepower or other guide system as approved by the MD-WASD. There shall be no need for personnel to enter the wet-well.

D. Discharge Connection: Mating discharge connection of pump unit (aka Base Elbow) shall be permanently affixed to the concrete in the wet well with Type 316 stainless steel epoxy set anchor bolts furnished by and of the size recommended by the pump manufacturer. However, anchor bolts shall be 3/4-inch stainless steel, minimum. Sealing of the pumping unit to the discharge connection shall be accomplished by a machined metal to metal watertight contact. Sealing of the discharge interface with a diaphragm, O-ring or profile gasket shall not be acceptable. Provide a six-inch discharge for 20 HP and above.

E. Each pump with its appurtenances and cable shall be capable of continuous submersion under water without loss of water-tight integrity. Major parts such a

stator casing, oil casing, sliding bracket, volute and impeller shall be of cast iron ASTM A-48, Class 35B. All surfaces coming into contact with sewage other than stainless steel shall be protected by a coating resistant to sewage. All exposed bolts and nuts shall be Type 316 stainless steel.

F. The discharge connection (aka Base Elbow) shall be design and manufactured such that it will accept a Flygt CP or NP pump model. The base elbow shall be a product of the pump manufacturer and not a third party fabricator.

G. The pumps shall have a maximum weight of 1,500 pounds, as required to meet conditions described in these Specifications and design operating characteristics. The previously stated weight requirement supersedes any other weight listed elsewhere in these specifications. Pumps shall have a minimum efficiency of 50% at Best Efficiency Point (BEP).

2.02 COOLING SYSTEM

A. Motors shall be sufficiently cooled by the surrounding environment or pumped media. Cooling system shall provide for continuous operation in ambient temperatures up to 104^{o}F.

2.03 PUMP CONSTRUCTION

A. Material and Coating: The major pump components shall be ASTM A48, "Gray Iron Castings", Class 35B cast iron, with smooth surfaces devoid of blow holes and other irregularities; of sufficient strength, weight and metal thickness to insure long life, accurate alignment and reliable operation. All exposed nuts and bolts shall be Type 316 stainless steel. All surfaces coming into contact with sewage other than stainless steel shall be protected by an approved sewage resistant coating. The pump exterior shall be sprayed first with PVC epoxy primer. All remaining surfaces where watertight seal is required shall be machined and fitted with nitrile rubber "O" rings. Fittings shall be such that the sealing is accomplished by metal-to-metal contact between the machined surfaces.

B. Cable Entry Seal:

1. The cable entry water seal shall be designed to preclude specific torque requirements to insure a watertight and submersible seal. The cable entry shall be comprised of a cylindrical elastomer grommet flanked by stainless steel washers, all having a close tolerance fit against the cable outside diameter and the entry inside diameter and compressed by the entry body containing a strain relief function separate from the function of sealing the cable.

2. The cable entry junction chamber and motor shall be separated by a stator lead sealing gland or terminal board, which shall isolate the motor interior from foreign material gaining access through the pump top.

3. Cable entry assemblies utilizing an epoxy for sealing may be considered, on a case-by-case basis. Epoxy shall be locally and commercially available, and shall have maximum published cure time of six (6) hours at room temperature and shall be suitable for use in a municipal sewerage environment.

C. Impeller: The impeller(s) shall be of gray cast iron, Class 35B, dynamically balanced, single or double shrouded, non-clogging design having a long throughlet without acute turns. The impellers shall be capable of handling solids, fibrous materials, heavy sludge and other matter found in normal sewage applications. The impeller shall be of a single vane, 2 or 3 vane non-clogging design. Recessed impellers are not acceptable by the City. Impeller(s) shall be keyed to the shaft, retained with an Allen head bolt and shall be capable of passing a minimum 3-inch diameter solid sphere. One impeller tool shall be provided with each pump.

D. Wear Rings: A wear ring or wear plate system shall be used to provide efficient sealing between the volute and suction inlet of the impeller. Each pump shall be equipped with a brass, or nitrile rubber coated steel ring insert that is drive fitted to the volute inlet.

E. Volute: Pump volute(s) shall be single-piece gray cast iron, Class 35B, non-concentric design with smooth fluid passages large enough at all points to pass any solids that may enter the impeller.

F. Shaft and Mechanical Seal:

1. The pump and rotor shaft shall be the same unit. The shaft shall be ANSI Type 420 series stainless steel, or approved equal.

2. Each pump shall be provided with a tandem mechanical rotating shaft seal system. Seals shall run in an oil reservoir. Lapped seal faces must be hydro-dynamically lubricated at a constant rate. The lower seal unit, between the pump and the oil chamber shall contain one stationary and one positively driven rotating tungsten or silicon carbide ring. The upper seal unit, between the oil sump and motor housing, shall contain one stationary tungsten carbide or ceramic ring and one positively driven rotating carbon ring. The use of a positively driven rotating tungsten or silicon carbide ring is acceptable in lieu of the positively driven rotating carbon ring. Each seal interface shall be held in contact by its own spring system. The seals shall require neither maintenance nor adjustment, but shall be easily inspected and replaceable. Each pump shall be provided with an oil chamber for the shaft sealing system. The oil chamber shall be designed to prevent over-filling and to provide oil expansion capacity. The drain and inspection plug with positive anti-leak seal shall be easily accessible from the outside. The pump shaft shall rotate on 2 permanently lubricated bearings with a minimum L10 rating of 50,000 hours.

2.04 PUMP MOTOR

A. The pump motor shall be squirrel cage induction, shell type design, housed in an air filled, watertight chamber, no more than 60 HP and 1,800 RPM, 240/480 volts, 3 phase, 60 Hertz, 1.15 S.F., NEMA Type B. The stator winding and stator leads shall be insulated with moisture resistant Class F insulation which will resist a temperature of 155 degree centigrade. The stator shall be dipped and baked 3 times in Class F varnish. The motor shall be designed for continuous duty capable of sustaining a minimum of 12 starts per hour. Motors shall be approved for Class 1, Division II, Group D atmospheres in accordance with NEC classification for hazardous areas. Motors shall be able to start within the 1300% factor allowed by NEC 430-52 or documentation shall be provided as to why it cannot.

B. Each unit shall be provided with an adequately designed cooling system to permit continuous operation in totally, partially, or non-submerged condition. Cooling media channels and ports shall be sized to be non-clogging.

C. Motor bearings shall be permanently grease lubricated. Oil filled motors are not acceptable.

D. Thermal switches shall be embedded in the stator lead coils. All stators shall incorporate thermal switches in series to monitor the temperature of each phase winding. At 125 degrees C (260 degrees F) the thermal switches shall open, stop the motor and activate an alarm. These thermal switches shall be used in conjunction with and supplemental to external motor overload protection and shall be connected to the control panel. Wire nuts or crimping devices are not acceptable. The motor and pump shall be designed and assembled by the same manufacturer

E. The pump motor cable shall be suited for submersible pump applications with Underwriters Laboratory approval permanently embossed on the cable. Cable sizing shall conform to the National Electric Code Specifications for pump motors. Each pump shall be furnished with ample cable such that one continuous length of cable, supplied by pump manufacturer, will be all that is required to run from pump, when lowered in the wet-well, to the controls, without need of splices.

F. The motor horsepower shall be adequate such that the pump is non-overloading throughout the entire pump performance curve from shut-off through run-out.

PART 3 EXECUTION

3.01 INSTALLATION

A. All equipment shall be installed as shown on the Plans and in accordance with these specifications.

B. All motors shall be factory mounted by the driven equipment manufacturer in accordance with the motor manufacturers drawings and instructions. Field installation of the unit, including final alignment shall be the responsibility of the

Contractor.

C. Installation shall include furnishing all necessary appurtenances for initial operation and making final adjustments to place the equipment in operable condition.

D. All control and alarm wires, as required, shall be provided even if not shown on plan drawings.

3.02 PREPARATION FOR STORAGE

A. All flanges shall be covered to prevent damage. Pump motors, and shafts will be stored inside warehouses. Pumps may be stored outside, on wood members away from the ground, at sufficient elevation to prevent flooding, and protected from the weather by secured canvas or plastic coverings.

3.03 PUMP TESTS

A. The manufacturer shall perform the following inspections and tests on each pump before shipment from the factory:

1. Impeller, motor rating and electrical connections shall be checked for compliance with customer's purchase order.

2. Motor and cable insulation tests for moisture content or insulation defects shall be made.

3. Prior to submergence, the pump shall be run dry, to establish correct rotation and mechanical integrity.

4. Pump shall be run for 30 minutes submerged a minimum of 6 feet underwater.

5. After the operation tests, the insulation test is to be performed again. A written report, signed by a professional engineer, registered in the state where the tests were performed, stating that "A" through "D" (above) were performed and that the tests were satisfactorily accomplished, shall be supplied with each pump at the time of shipment.

3.04 FIELD QUALITY CONTROL

A. The supplier shall provide start-up service to place the pumps and controls in proper operation.

B. During this service, the Manufacturer’s Representative shall review the operation of the equipment and the pump and station will be inspected for proper installation and shall coordinate with Contractor and make recommendations.

C. The pumps shall be tested at start-up and the voltage, current and other significant parameters recorded. The manufacturer shall provide a formal test

procedure and forms for recording the data.

D. The supplier shall submit a written report to the Contractor, stating results of the start-up inspection. A copy of the report shall be furnished to the City. The Contractor shall inform the City 24-hours prior to commencement of such start-up services and tests. These services shall be at no cost to the City.

END OF SECTION

Revision #7, 5-2-2023
1.04 Quality Assurance added Paragraphs C and D
2.01 Pumps Paragraph B removed KSB Pumps from Products List

SECTION 11215

SUMP PUMP

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish and install sump pump and all appurtenances, as specified below, where shown on the plans or as required for a complete installation.

1.02 SUBMITTALS

The Contractor shall furnish full detailed manufacturer specifications, characteristic curves and shop drawings showing the make, model and descriptive data to the Department for the pump unit he proposes to supply. Submittals shall be approved prior to installation of pumping unit.

PART 2 - PRODUCTS

2.01 SUMP PUMPING UNIT

A. Sump pump in the dry-well shall be a submersible type with a cast iron or bronze housing, by Barnes, Covert Pump Division, or approved equal. Pump shall be rated for duty in conditions it shall be subjected to, including being totally submerged. Unit shall contain mechanical seal with rotating carbon face and stationary ceramic face. The motor shall be single phased, oil-filled unit, with overload protection and maximum ½-horsepower. However, sump pumps installed in dry wells ranging from 20 feet to 24 feet depths are excluded from this requirement and shall meet Department approval.

B. Sump in shall be sized per sump pump manufacturer's recommendation, but unless approved, not less than dimensions shown on the Department's Standard Pump Station Drawings. Dry-well sump shall include space for external float switch. Float switch shall be furnished with 10 feet cord and piggyback plug.

C. Where installed in valve-pit, sump pump shall be 1/3-horsepower, single phase, oil filled unit, with overload protection. Unit shall be Series BP27, by Barnes, or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

A. All equipment shall be installed as shown on the approved plans.

B. Installation shall include furnishing all necessary wiring, piping and other necessary appurtenances for satisfactory operation and making final adjustments to place the equipment in operable condition.

C. All power, control and alarm wires as required shall be provided even if not shown on plans.

D. Installation, testing and start-up shall be as recommended by the manufacturer provided specifications.

E. Dry-well Installation: Provide a sump and sump pump in the floor of the dry-well in a corner opposite the wet-well. Slop the floor from all directions toward the sump. The PVC pump discharge line shall contain two swing-disk type check valves and a gate valve, and shall be piped to the top of the dry-well before passing through the wall into the wet-well.

F. Valve Vault Installation: Sump pump and local motor starting switch shall be installed in the valve pit and hard-wired to the control cabinet. Manual motor starting switch shall be NEMA 3, 4X and 12, corrosion-resistant, dust-tight and watertight. It shall be Crouse-Hinds NSSC-D22, or approved equal. Discharge from pump shall be conveyed to the wet-well using 1-1/2 inch diameter PVC pipe. (The Department may consider approval of 1-1/4 inch diameter discharge piping as shown in the Standard Pump Station Drawings.)

END OF SECTION

SECTION 11500

FUEL STORAGE TANKS

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The work under this Section includes furnishing and installing above ground fuel storage tanks, with concrete bases, gauges, valves and piping, as required and as shown on Drawings; and other related items necessary for a complete installation, as indicated on the Contract Drawings.

1.02 RELATED SECTIONS

A. Section 02314 - Excavation, Backfill and Fill For Structures

B. Section 03300 - Cast-in-place Concrete, Reinforcing and Formwork.

C. Section 09900 – Painting

D. Section 16420 - Stationary Engine-Generator Set

E. Section 16425 - Portable Engine-Generator Set

1.03 REFERENCE, CODES AND STANDARDS

A. FDEP - Florida Department of Environmental Protection, Ch. 62-761 & 62-762, FAC

B. NFPA 30 - Flammable and Combustible Liquids Code.

C. NFPA 31 - Installation of Oil-Burning Equipment.

D. NFPA 70 – National Electrical Code (NEC)

E. NFPA 78 - Protection of Life and Property against Lightning.

F. FBC - Florida Building Code.

G. RER – Regulatory & Economic Resources Department, Miami-Dade County, Ch. 24-Miami-Dade County Environmental Code

H. U.L. Subject #2085 and #142.

I. UFC - ICBO Uniform Fire Code, Section 79 Appendix A-II-F

J. OSHA – Occupational Safety and Health Administration Standard 1910.23-1910.24

1.04 QUALITY ASSURANCE

A. Comply with the appropriate codes, regulations and standards referenced in paragraph 1.03.

1.05 SUBMITTALS

A. The fuel storage tank and accessories shall be FDEP approved and installation plans must have been reviewed and approved by RER/DERM.

B. Prepare and submit a site plan, drawn to scale, containing the following:

1. Show property lines and indicate occupancy or use of adjacent property.
2. Show streets, intersections and railroads.
3. Show buildings on the site and indicate type of construction. Show building openings on walls adjacent to tanks.
4. Show important utility lines, sewer, water, gas and electric including fire hydrants and catch basins.
5. Show any nearby waterways, streams, rivers, lakes or bodies of water.
6. Show any existing underground or aboveground tanks.
7. Show location of proposed tank and indicate shortest distance to buildings and property lines.

C. Prepare and submit detail drawings of tank, to include the following:

1. Tank type double-walled aboveground or underground storage tank (AST or UST), size, dimensions and spacing between adjacent tanks. Note: Miami Dade Water and Sewer Department requires aboveground tanks whenever possible.
2. Base slab dimensions and bollard location and size.
3. Vent size, height, location and type of cap.
4. Fill details including spill containment and overfill protection.
5. Piping details including shut-off/isolation valves and anti-siphon valve.
6. Pumps and other equipment, where applicable, including location, size and type.
7. Electrical details including shut-off switch location and grounding wire.
8. Level gauges and leak detection equipment. (i.e. Morrison Clock gauge for fuel level, Krueger Pop-up gauge for interstitial monitoring)
9. Signs and decals.

1.06 WARRANTY

The tank must carry a thirty year (30) warranty.

1.07 DELIVERY AND STORAGE

A. Deliver, store, protect and handle products under provisions of Section 01600.

B. Protect while transporting, storing, installing until work is completed.

C. Do not handle or move tank unless it is empty.

D. Do not drop or drag the tank.

E. Do not handle or install tank without having knowledge and experience in procedures involved with proper and safe installation of tank used for storage of stable, flammable and combustible liquids.

F. Equipment required for the shipping and off-loading of aboveground and underground storage tanks include lifting straps, forklift and crane up to 150 ton capacity and nylon tie down straps.

1.08 GENERAL FIRE PROTECTION

A. A sign which prohibits smoking shall be conspicuously posted.

B. Portable fire extinguisher shall be provided for the suppression of fires in accordance with NFPA 10 and UFC for high hazard area.

C. Exterior warning signs and labels shall be at proper location and configuration to meet applicable code requirements.

PART 2 - PRODUCTS

2.01 ABOVEGROUND TANKS

A. General:

The Contractor shall furnish an FDEP approved secondarily contained shop fabricated aboveground storage tank (AST) for flammable and combustible liquids. Storage tank system shall be UL listed for both vehicle impact protection and projectile resistant and shall be tested to and listed for the following:

1. UL - 142, aboveground steel tanks for flammable and combustible liquids.
2. UL – 2085, protected aboveground tanks for flammable and combustible liquids.

B. The tank shall be cylindrical in shape and have continuous welds on all sides conforming to the American Welding Standard for continuous weld. The primary and secondary tank shall be minimum 0.125 inch thick carbon steel and manufactured in accordance with U.L. 142. However, thickness shall be based on a thirty year (30) warranty.

C. The tank shall be designed and tested to provide 2-hour fire protection. The fire resistance of the tank shall be tested in accordance with the procedure established in U.L. 2085.

D. The primary steel tanks shall have "emergency vent" system as per NFPA 30 Code requirements.

E. The AST shall have a tank leak detector tube to allow for physical monitoring capability of the interstitial space between the primary and the secondary tank. A mechanical interstitial monitoring gauge (i.e., Kreuger Pop-Up) shall be installed.

F. The AST shall have a mechanical level gauge (i.e., Morrison Bros. Clock Gauge Model 818/818F).

G. The primary steel tank shall be pressure tested at 5 psig for 24 hours.

H. All openings shall be from the top only.

I. The AST shall have a coated exterior to resist weather and reflect sunlight.

J. The AST shall have a warranty of 30 years regardless of capacity.

K. The AST shall be constructed to allow for grounding in accordance with NFPA 78.

L. Tank shall be Fireguard Aboveground Tank or approved equal.

2.02 TANK CAPACITY

The tank capacity shall be as shown on Drawings. Minimum tank size shall be based on the fuel capacity required to run one pump continuously for five days, at maximum horsepower.

2.03 VENTING

A. Atmospheric Vent: The tank system shall be furnished with a 2-inch vent and an appropriate emergency vent. An open atmospheric utility vent cap shall be installed on the 2-inch vent line to protect against intrusion and blockage from water, debris or insects. Venting systems shall meet all 2-inch standard vent and emergency vent requirements of U.L. 142. Height of the vent line shall be per code. Vent line shall be capable of sufficient venting into the atmosphere in case of pressure build-up inside the tank. Vent cap shall be installed with no overhead obstructions to allow free flow of vapors from the vent.

B. Primary Tank Emergency Vent: The tank system shall be furnished with pressure relief nipples and emergency pressure relief devices to automatically relieve the pressure of the primary tank before it reaches 2.5 psig. It shall include a fire screen to prevent ignition from an external source.

C. Secondary Containment Venting Device: The tank system's secondary containment shall be furnished with an emergency venting device. The venting device shall consist of a pressure relief nipple and a relief device. The emergency device will open before the secondary containment internal pressure reaches 2.5 psig.

2.04 OVER SPILL CONTAINMENT

A. The AST systems shall include an FDEP approved over spill containment device.

B. Over spill containment device shall be mounted on top of the tank and shall surround the tank fill pipe to catch occasional spills.

C. A hand-activated spring-loaded normally closed valve shall be provided inside the containment to drain the spill back into the tank.

D. Lid to over spill containment device shall meet proper color–coding requirements for diesel fuel.

2.05 FILL PIPE

The tank system shall be furnished with a MNPT fitting for filling. The fill pipe shall be equipped with an adapter and lockable cap. Fill pipe diameter shall be 4-inches.

2.06 COLLISION PROTECTION

Collision protection approved by the tank manufacturer shall be located around tank perimeter for vehicular protection. Pipe bollards shall be installed for collision protection, as follows: concrete filled steel posts, 4-inches diameter (minimum) by 6 feet long, shall be set 3 feet into the ground within a 15-inch diameter concrete filled hole. Post shall be spaced 4 feet center to center and shall be spaced from tank in accordance local codes.

2.07 CONCRETE PAD

The tank system shall be installed on a reinforced concrete pad to protect against stresses from uneven settlement and to assure that the tank supports allow for inspection and maintenance beneath the tank. Concrete foundation (i.e, pad) shall have a minimum compressive strength in 28 days equal to 3000 psi. Pad length, width, thickness and placement specifications shall be as recommended by the manufacturer or engineer of record.

2.08 PIPING AND ACCESSORIES

A. All accessories (vents, product fill, etc.) shall be installed to meet the site specific requirements and governing codes.

B. Adherence to all operational safety precautions shall be taken under consideration and piping shall include safety valves as follows:

1. Angle check valve with pressure relief or foot valve and strainer. Foot valve and strainer shall be located 1-inch from the inside bottom of the tank.

2. Shut-off/isolation valve with fusible link on supply and return piping.

3. Anti-siphon valve (i.e., OPW Model # 199ASV) on the highest point of the supply line closest to the tank, if suction/supply line falls below the high fuel level.

4. Check valve in the return line.

C. Exterior warning signs and labels shall be properly located and meet applicable code requirements. Tanks shall be marked as required with warning signs: "FLAMMABLE" or "COMBUSTIBLE", "NO SMOKING", product identification, etc.

D. Exposed piping exterior surface shall be primed and coated with protective finish (i.e., Keeler and Long Tri-Polar Ferrite Primer and Rust-Oleum Industrial Acrylic Enamal 5225 (Royal “Safety” Blue) in a WASD approved safety blue color for diesel product.

2.09 ELECTRICAL

A. Electrical service and fuel piping to the pumps unit shall be installed in accordance with the requirements of NEC and NFPA and local code requirements.

B. All electrical devices used with or located twenty (20) feet of the tank shall conform to NFPA 70 Hazardous Locations. All electrical conduits and wiring connected to the tank shall be explosion proof and in strict accordance with NEC Class 1, Division 1.

C. Electrical grounding shall be installed on tank.

2.10 STAIRS AND CATWALKS

A. Install stairs/catwalks to facilitate access, inspections and maintenance services to the tanks as required.

B. Stairs shall comply with OSHA Standard 1910.24.

C. Railings shall be provided as required by OSHA Standard 1910.23

D. Stairs shall be 36” wide, straight-tread with top platform.

a. Top platform shall be 30” in direction of travel by 36” wide.

b. Top platform shall be 24”-30” below top of tank (excluding appurtenances).

E. Stair assembly shall be galvanized carbon-steel, free-standing with a 1”-3” clear gap between stairs and tank. (It shall not be in contact with tank or be supported by tank.)

PART 3 - EXECUTION

3.01 TANK SITE

A. The tank location and foundation shall comply with the all applicable local codes and ordinances.

B. Tanks shall not be located over underground utilities or directly beneath overhead power and telephone lines.

C. The tank shall be protected from vandalism and accidental damage in accordance with all applicable codes.

D. Fire department vehicle access should be provided within 150 feet of the tank.

E. The venting of the tank to a remote location must include the use of a steel pipe equal to or greater in size than the vent outlet. The methods of supporting such piping against displacement must comply with local codes.

3.02 FOUNDATION REQUIREMENT

A. The foundation for the tank shall be designed to support the tank plus 100% of the weight of the maximum amount of the product the tank will be storing. The foundation design shall also include provision for draining surface water away from the tank to minimize the risk of fuel accumulation from the over fill or spills at the tank footings.

B. The tank foundation (concrete pad) shall sit on compacted fill, free of organic material. The tank shall be installed on a continuous solid slab which will uniformly distribute the weight of the tank and its contents to the soil.

3.03 INSTALLATION OF ABOVEGROUND FUEL TANKS

A. General: The aboveground tanks shall be set on a concrete foundation (pad) in accordance with current installation instructions, foundation engineering drawings and shall comply with all governing code requirements.

1. Concrete Foundation (Pad): Reference and follow the appropriate manufacturer's or engineer of record’s drawings for the respective foundation size and load bearing requirements for pad lengths, widths, thickness, and placement specifications.

2. Unloading and Handling: A thorough inspection of the entire assembly shall be conducted prior off loading. Check for any damage, chipping or other impairments incurred during transportation. Do not remove the shrink wrapped plastic cover until after final installation of vents and piping. However, shrink wrap should be left on if installation is not to concur with delivery, as vault finish will be affected if shrinkwrapped and left exposed to sunlight for several days.

3. Equipment used to off-load: The equipment shall be adequate size and capability to lift the vault without dragging and dropping to ensure that no damage is done to the vault or its coating. The vault shall be lifted lowered, and secured only by use of nylon straps (chain and cables are not allowed) placed at designated lifting areas to avoid damage to the assembly.

4. The vault shall be anchored in accordance with applicable code requirements.

5. Air Pressure Test of Internal Steel Tank: Contractor shall verify the internal steel tank tightness during the process of placing the unit into service. Use the basic procedure and desired result as an unvaulted steel tank, and in accordance the industry standard procedures as published by the Steel Tank Institute or other professional organizations and manufacturer recommended procedures. Pressure test the tank at 5 psig. No leakage shall be permitted. Vaults under pressure shall not be left unattended.

END OF SECTION

SECTION 33 05 31.13 (15068)

PVC C900 SEWER FORCE MAINS

PART 1 GENERAL

1.01 SCOPE

A. This Section includes materials, installation and testing requirements of the Department for PVC C900 sewer force mains installed in its service area. Size range is 4 through 48 inches.

B. PVC C900 force mains are acceptable for use in areas with limited heavy vehicle traffic only. Not for use near gas stations or other sites which may have hydrocarbon contamination.

C. All PVC pipe used shall be of new or recent manufacturer. Pipe with surface discoloration will not be allowed.

D. Pipe Fittings shall be ductile iron.

E. Force mains 16 inch or larger shall be fully restrained the entire run of the pipe.

F. This Section does not purport to cover all material or installation procedures which may be required, whether by the nature of the proposed work, by the Department or by other regulatory agencies.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. The work shall proceed in accordance with the following specifications sections, bound herein:

1. Section 01 33 00 (UC-005) – “Project Approval”
2. Section 01 33 23 (01340) – “Shop Drawings”
3. Section 01 35 13 (01100) – “Special Project Procedures”
4. Section 01 35 26 (01016) – “Safety Requirements and Protection of Property”
5. Section 01 42 16 (01005) – “Defined Terms"
6. Section 01 55 26 (01750) – “Maintenance of Traffic and Use of Public Streets”
7. Section 01 71 23 (01031) – “Grades, Lines and Levels”
8. Section 02 00 00 (01011) – “Site Conditions”
9. Section 31 23 33 (02315) – “Trenching and Backfilling for Piping Systems”
10. Section 33 01 10.54 (02505) (UC-170) – "Cleaning and Testing of Mains"
11. Section 33 14 00 (15060) – “Piping and Fittings”
12. Section 33 31 23 (UC-750) – ”Sewer Force Mains”

1.03 QUALITY ASSURANCE

A. All material and installation shall be in accordance with the Department's Design and Construction Standard Specifications and Details and in shall be in full compliance with all applicable standards listed in Section 01 42 19 (01090) "Reference Standards" and this Section.

B. No deflection of joints is allowed for PVC pressure mains.

C. PVC pipe shall not be over-homed. Pipe installed below the water table where the homing mark is not visible shall utilize an over-insertion prevention device; EBAA Iron Mega-Stop Series 500; S&B Technical Product, RIG, Resistance Insertion Grip; or approved equal.

D. Pipe Embedment Material shall be class 1 backfill material with a maximum rock size of 3/4-inches.

1.04 SUBMITTALS

A. See Sections 33 31 23 (UC-750) ”Sewer Force Mains”, 33 14 00 (15060) “Piping and Fittings.”, 01 33 23 (01340) “Shop Drawings.”

B. Submit shop drawings in accordance with the Departments specifications or submit the Pre-Approved Product List Manufacturer.

C. PVC Pipe not on the Pre-Approved Products list shall supply the following:

1. Provide affidavit of compliance with AWWA C900.
2. Submit fully dimensioned cross-section of the bell and barrel of the pipe. Show the bell maximum outside diameter in the pressurized area and its minimum wall thickness at the same location.
3. Submit copies of the following manufacturer-required tests conducted on project pipe:
    a. Quick-burst strength of pipe and couplings.
    b. Flattening resistance of pipe.
    c. Record of additional tests after test sample failure.
4. Submit manufacturer's literature of gray iron and ductile-iron fittings including dimensions, thickness, weight, coating, lining, and a statement of inspection and compliance with the acceptance tests of AWWA C110 or C153. Submit copy of report of pressure tests for qualifying the designs of all sizes and types of AWWA C153 fittings that are being used in the project. The pressure test shall demonstrate that the minimum safety factor described in AWWA C153 is met.
5. Submit outline drawings and materials description of service connection saddles, corporation stops, and pipe plugs.
6. Submit test results for the restrained joint system to be used certified by an independent test laboratory demonstrating compliance with these

specifications for each size and pressure rating.

7. Submit restrained joint system installation instructions. Include bolt torque limitations and assembly tolerances.

1.05 MANUFACTURER'S SERVICE

A. Provide pipe manufacturer's services at the jobsite for the following minimum labor days, travel time excluded: One labor-day to instruct the Contractor's personnel in the preparation and execution of rubber-gasket and solvent-welded joints for the sizes of pipes to be installed in the project.

1.06 SAFETY REQUIREMENTS

A. See Section 01 35 26 (01016) “Safety Requirements and Protection of Property.”

1.07 DESIGN REQUIREMENTS

A. See Section 33 31 23 (UC-750) “Sewer Force Mains.” and Section 01 33 00 (UC-005) “Project Approval”

PART 2 PRODUCTS

2.01 GENERAL

A. See Section 33 14 00 (15060) “Piping and Fittings.”

2.02 CASTINGS

A. Castings shall be in accordance with Section 33 05 81 (05550) “Castings.”

2.03 EMBEDMENT MATERIAL

A. Embedment material, for bedding, haunching and initial backfill, shall conform with the requirements of Section 31 23 33 (02315) “Trenching and Backfilling for Piping Systems.”

2.04 PIPE

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. Pipe shall conform to AWWA C900, rubber-ring gasket bell end or plain end with elastomeric gasket coupling, cast iron equivalent outside diameter, material cell classification 12454 per ASTM D1784.

1. Pipe 4-inches through 30 inches DR 18
2. Pipe 36-inches through 42-inches DR 21
3. Pipe 48-inches DR 25

2.05 FITTINGS

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. Fittings shall be Zinc coated Ductile Iron and shall conform to AWWA C153 or AWWA C110.

C. Fittings shall be Lined and coated with fusion-bonded epoxy.

2.06 FLANGES

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. Flanges on outlets of fittings shall be Class 250 per ASME B16.1.

C. PVC flanges shall be of the one-piece solid socket design and shall be made of the same material as the pipe. Manufacturer’s pressure rating shall be at least 250 psi at a temperature of 73°F. Minimum burst pressure shall be 500 psi. Flanges shall match the dimensions of ASME B16.5, Class 250, steel flanges for outside diameter, bolt circle, and bolt holes. Do not use Van Stone flanges.

2.07 FLANGED COUPLING ADAPTERS

A. See Section 33 05 98 (15065) “Miscellaneous Materials.”

2.08 OUTLETS AND NOZZLES

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. All connections to PVC require a saddle.

C. For outlets larger than 2 inches, use a Ductile Iron tee with a flanged or MJ outlet.

2.09 RESTRAINED JOINTS

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. PVC Pipe 16 inch or larger shall be restrained at all joints for the entire run of the pipe.

C. Provide restrained joints where indicated in the drawings. Restrained joints shall be provided by restraining systems that incorporate a wedge restraint on the restraint ring to provide positive restraint.

D. Restraint devices for bell-and-spigot joints shall consist of a split restraint ring installed on the spigot, connected to a solid backup ring seated behind the bell.

E. Restraining Glands shall be EBAA Iron Series 2000 and 1600 or approved equal.

F. The ASTM A536 ductile iron casting of the restrained gland shall be bonded powder coated. The wedge and wedge assembly shall have a bonded liquid polymer coating

applied for corrosion protection. The gland shall utilize torque limiting twist off wedge actuation screws.

G. T-bolts, studs, and connecting hardware shall be high-strength, low alloy material in accordance with AWWA C111.

H. Design restraining devices to have a 2:1 safety factor based on the design strength of the pipe.

2.10 WYE STRAINERS

A. PVC wye strainers shall be manufactured of the same material as the pipe, with 30-mesh screens and Viton seals. Connecting ends shall be the socket type, solvent welded. Provide one spare screen for each strainer.

2.11 DETECTABLE TAPE/TRACER

A. Detectable tape/tracer approved for use by the Department are shown on Sheet number 10.2 of the Pre-Approved Product List.

2.12 MISCELLANEOUS MATERIALS

A. The Contractor shall furnish and install all miscellaneous material and appurtenances required for a complete installation. Section 33 05 98 (15065) “Miscellaneous Materials” specifies material necessary for a complete installation, not specified herein. These materials, including but not limited to the following, shall be installed when required, whether shown on the Plans or not.

1. Anchor Bolts, Bolts, Nuts and Washers
2. Blind Flanges
3. Corporation Stops
4. Gasket Lubricant
5. Joint Material for Flanged Pipe, Valves and Fittings
6. Stainless steel repair clamps, with stainless steel bolts
7. 90^{o} Street Elbows
8. Tie-Rods

2.13 SADDLES FOR CONNECTIONS TO SEWER FORCE MAINS

A. See Section 33 31 23 (UC-750) “Sewer Force Main.”

PART 3 EXECUTION

3.01 GENERAL

A. See Section 33 14 00 (15060) “Piping and Fittings.”

3.02 PRODUCT MARKING AND UNDERGROUND LOCATION

A. Legibly mark pipe at 5-foot intervals and each coupling to identify the nominal diameter, the outside diameter base, that is, cast-iron or steel pipe (IPS), the material code for pipe and couplings, the dimension ratio number, AWWA C900, and the seal of the testing agency that verified the suitability of the material for potable water service (NSF/ANSI 61).

B. Install 10 gauge tracer wire taped every four feet to the buried PVC pipe, a magnetic detection tape one foot above the buried PVC pipe and 3M compatible magnetic location ball markers two feet below grade every 100 feet or at any vertical and horizontal deflection point. See Pre-Approved product list Sheet 10.2.

3.03 DELIVERY AND TEMPORARY STORAGE OF PIPE

A. PVC shall be protected from UV degradation caused by extended exposure to direct sun. Pipe with surface discoloration shall not be installed and immediately removed from the project site. Tarps used to protect the pipe from sunlight shall be placed to allow for adequate ventilation to prevent heat build-up.

B. Ship, store, and place pipe at the installation site, supporting the pipe uniformly. Avoid scratching the pipe surface. Do not stack higher than 4 feet or with weight on bells. Cover to protect from sunlight.

C. Do not drag PVC pipe over the ground, drop it onto the ground, or drop objects on it.

D. Store loose pipes on racks with a maximum support spacing of 3 feet. Provide shades for pipe stored outdoors or installed outdoors until the pipe is filled with water. Store fittings indoors in their original cartons.

E. Store solvent cement indoors or, if outdoors, shade from direct sunlight exposure. Do not use solvent cements that have exceeded the shelf life marked on the storage container.

3.04 HANDLING PIPE

A. Hoist pipe with mechanical equipment using a cloth belt sling or a continuous fiber rope that avoids scratching the pipe. Do not use a chain. Pipes up to 16 inches in diameter may be lowered by rolling on two ropes controlled by snubbing. Pipes up to 6 inches in diameter may be lifted by hand.

3.05 INSTALLING BURIED PIPING

A. See Sections 31 23 33 (02315) “Trenching and Backfilling for Piping Systems” and Section 33 14 00 (15060) “Piping and Fittings.”

B. Bedding material and backfill to 1 foot above the pipe for PVC shall be well graded Class 1 backfill with a max rock size of ¾-inch compacted in 6-inch lifts. The minimum trench width shall be the pipe width plus 24-inches (12-inches on each side).

C. Before installation, check pipe and fittings for cuts, scratches, gouges, buckling, kinking, or splitting on pipe ends. Remove any pipe section containing defects by cutting out the damaged section of pipe.

D. Do not install PVC pipe when the temperature is below 40°F or above 90°F.

E. Do not install pipe that is gouged or scratched forming a clear depression.

F. Pipe shall be installed utilizing an over-insertion prevention device.

G. Install in accordance with AWWA C605, and as follows.

1. When installing pipe in trenches, do not deviate more than 1 inch from line or 1/4 inch from grade. Measure for grade at the pipe invert.

2. Backfill materials in the pipe zone shall be imported sand per Section 31 23 33 (02315) “Trenching and Backfilling of Piping Systems”. Do not add successive layers unless the previous layer is compacted to 90% relative compaction per ASTM D1557.

3. Compact material placed within 12 inches of the outer surface of the pipe by hand tamping only.

4. Compact trench backfill to the specified relative compaction. Do not float pipe. Do not use high-impact hammer-type equipment except where the pipe manufacturer warrants in writing that such use will not damage the pipe.

5. Install detector balls 2 feet below grade every 100 feet on straight lines, at any point changing direction, vertical or horizontal; in addition, install 10 gauge tracer wire taped every 4 feet to the buried PVC C900 pipe and a magnetic detection tape 1 foot above the PVC C900 pipe.

3.06 PIPE LAYOUT FOR CURVED ALIGNMENT

A. Pipe lengths shall not be bent for curved alignment.

3.07 ASSEMBLY OF RUBBER-GASKET PIPE JOINT

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. The spigot and bell or bell coupling shall be dirt free and slide together without displacing the rubber ring. Lay the pipe section with the bell coupling facing the direction of laying.

C. Insert the rubber ring into the groove in the bell in the trench just before joining the pipes. First clean the groove. Observe the correct direction of the shaped ring. Feel that the ring is completely seated.

D. Lubricate the spigot over the taper and up to the full insertion mark with the lubricant supplied by the pipe manufacturer. If the lubricated pipe end touches dirt, clean the pipe end and reapply lubricant.

E. Insert the spigot into the bell and force it slowly into position.

F. Check that the rubber ring has not left the groove during assembly by passing a feeler gauge around the completed joint.

3.08 CLEANING AND TESTING OF SEWER FORCE MAINS

A. See Section 33 01 10.54 (02505) (UC-170) "Cleaning and Testing of Mains."

END OF SECTION

SECTION 15115

CHECK VALVES

PART 1 - GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish and install check valves complete and operable, including all appurtenances and accessories.

1.02 RELATED WORK SPECIFIED ELSEWHERE

Section 15100 - Valves, General

PART 2 - PRODUCTS

2.01 CHECK VALVE

A. General

1. The swing-check valves shall be standard (plain), outside lever-and-weight or outside lever-and-spring types, for normal horizontal installations, conforming to all of the applicable requirements of the most current ANSI/AWWA Standard C508, "Swing-Check Valves for Waterworks Service, 2-in. Through 24 In. NPS", except as otherwise specified herein. The valves shall be iron body, bronze mounted and suitable for buried service.

2. Valve bonnet opening shall be large enough to allow ample clearance for direct removal of disc by hand.

B. External Ferrous Items

All external ferrous items, except cast iron, shall be hot-dipped galvanized in accordance with the most current ANSI/ASTM Standard A123, "Zinc (Hot-Galvanized) Coatings on Iron and Steel Products", or ANSI/ASTM Standard A153, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware", or stainless steel.

C. Flanged Valves

Flanged valves shall have ends plain-faced and drilled conforming to ANSI Standard B16.1, "Cast Iron Pipe Flanges and Flanged Fittings", Class 125. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerline. All joint materials for flanged valves will be furnished with the valves; neoprene for sewer and SBR for water applications.

D. Clapper

1. The clapper shall swing clear of the waterway when the valve opens, permitting a full flow through the valve equal to the nominal diameter of the pipe.

2. The body and clapper seating surface shall be metal to metal, and shall be bronze.

3. The clapper disc and the clapper hinge arm, including the clapper disc cap screw, shall be bronze or cast iron. Clapper to hinge arm connection shall be such that the unit cannot be unscrewed by fluid flow.

D. Clapper Hinge Pin

1. The clapper hinge pin (shaft) shall be stainless steel conforming to AISI Type 316. For check valves with outside levers, the clapper hinge pin shall rest in bronze bushings and shall extend through the casing on the right hand side when facing the valve inlet.

2. The clapper hinge pins shall rest in bronze bushings provided with a compression packing or double nitrile o-ring seal and shall extend through the casing on the right hand side when facing the valve inlet. An opening shall be provided in each of two bosses on the body for easy access to either end of the hinge pin. The openings shall be tapped and provided with plugs.

E. See Part 2 of Section 15100, "Valves, General", for other components.

2.02 TESTING

All check valves shall be tested at the factory in accordance with Section 5.2 of the most current ANSI/AWWA Standard C508 and a Certified Test Report shall be furnished with each valve.

PART 3 - EXECUTION

3.01 GENERAL

All valves shall be installed in accordance with provisions of Section 15100, "Valves, General." Care shall be taken that all valves are well supported.

END OF SECTION

SECTION 15120

GATE VALVES

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install gate valves complete and operable, including all appurtenances and accessories.

B. The City will permit the use of resilient seated type gate valves in potable water systems, as described herein. Such use shall be restricted to potable water systems of nominal sizes 4-inch through 48-inch. All other size or system applications shall be allowed only if reviewed and approved by the City. Resilient seat gate valves shall only be used in sewer applications where cover depth is sufficient to mount the valve in the vertical position and only with review and approval of the City. Sewer lines may not dipped or lowered in close proximity to a gate valve for the purpose of providing said cover. Resilient seat gate valves used as tapping valves in sanitary sewer systems and laid upon their side shall be left open when the line is placed in operation and backed up with a plug valve to provide flow control.

1.02 RELATED WORK SPECIFIED ELSEWHERE

Section 15100 - Valves, General

PART 2 - PRODUCTS

2.01 GATE VALVES, GENERAL

A. As used herein, "ANSI" denotes the American National Standards Institute; "AWWA" denotes the American Water Works Association; and "ASTM" denotes the American Society for Testing and Materials.

B. All valves specified herein, whether manufactured under the provisions of AWWA C515, latest revision "Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service" shall be furnished with an Affidavit of Compliance from the manufacturer as required by Section 6.3 of AWWA C515 latest revision.

C. The MD-WASD requires that suppliers shall submit with their proposals, if bidding on valve sales to the City; or shop drawings, if supplying valves to the City for contract or donations work; all data as listed in the "Data to Be Supplied by the Manufacturer" Sections of the referenced standards. This material is Section 4.1 in C515, latest revision and is identical. Data to be furnished is as follows:
"*Catalogue Data.* The manufacturer shall supply catalogue data, including illustrations and a parts list that identifies the materials used for various parts. The information shall be in sufficient detail to serve as a guide in the assembly and disassembly of the valve and for ordering repair parts.
Weight information. The manufacturer shall provide a statement of the net assembled weight for each size of valve exclusive of joint accessories.

Assembly Drawings. The manufacturer or supplier shall submit to the purchaser one set of drawings showing the principal dimensions, construction details, and materials used for all parts of the valve. All work shall be done and all valves shall be provided in accordance with these drawings after the drawings have been reviewed and accepted by the purchaser."

In the quotation above, the word "purchaser" shall be construed to mean the Miami-Dade Water and Sewer Department in either direct purchase or contract/donations situations.

D. All work performed according to the standards cited above, except prototype testing, shall be subject to inspection and acceptance by the City or its representatives who shall have access to all places of manufacture where these valves are being produced and tested. Suppliers shall, with their shop drawing submittals, submit the company name and location of the actual manufacturer of the valve which shall include Country, City, and street address of the manufacturer. Where valves are not domestically produced and tested, the City reserves the right to require that the Affidavit of Compliance be signed and sealed by a Professional Engineer, licensed to practice in the state of where the importing firm is located or the State of Florida. When this is required, the City's decision as to its necessity shall be final and no extra compensation will be allowed.

E. All valves shall conform with ANSI/NSF Standard 61, "Drinking Water System Components-Health Effects".

F. Grades B and C bronze as listed in Table 1 of AWWA C500, latest revision shall not be used in the fabrication of any of the various valve types listed in this specification. Aluminum bronzes, if used, shall not dealuminize and the method of preventing this shall be fully described in the submittal.

G. AWWA Standard C515, latest revision lists a number of copper alloys for valve stems and gates. Of these the City will accept alloys with the following Unified Numbering Series (UNS) numbers; C66100, C87600, C99400 and C99500. This same standard lists other copper alloys for Stem Nuts and Gates. Of these the MD-WASD will accept alloys with the following UNS numbers; C83600, C83450, C95200, C95500, C95800 C99400 and C99500.

H. Other copper alloys not listed in the standard may be used but must meet the performance requirements of the Standard, including but not limited to, minimum yield strength, chemical requirements and corrosion. The City requires that alloys containing more than sixteen (16) percent zinc shall not be used.

2.01 RESILIENT SEATED GATE VALVES

A. Resilient-seated gate valves shall be manufactured in accordance with the applicable provisions of the most recent ANSI/AWWA Standard C515, latest revision “Reduced-Wall Resilient-Seated Gate Valves for Water Supply Service” as modified herein.

B. Valves shall have non-rising stems (NRS) and are to be installed under buried and/or submerged conditions. The design working water pressure shall be 250 psig for 3 48-inch sizes. For valves manufactured in conformance with the provisions of AWWA C515, latest revision as modified herein, the design working water pressure shall be a minimum of 200 psi for all sizes. In addition to the pressure requirements, the valve assembly and mechanism shall be capable of withstanding an input torque of 200 ft.lbs. for valves 4-inch and smaller, and 300 ft. lbs. for valves

6-inch and larger. With the valve open the unobstructed waterway shall have a diameter not less than the full nominal diameter of the valve.

C. Valve body: Valves manufactured in conformance with AWWA C515, latest revision shall be iron-bodied and shall conform to ASTM Standard A395-99, "Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures" or ASTM Standard A536-84 "Ductile Iron Castings". Body and bonnet thickness shall conform with the requirements of AWWA Standard C515 latest revision.

All ferrous metal items in contact with the line fluids, except gray or ductile cast iron, shall be AISI Type 316 stainless steel. Valve body and bonnet gaskets shall be rubber or rubber composition, inorganic mineral fiber and paper are not acceptable. Rubber and rubber composition materials shall be suitable for use in water containing chlorine or chloramines and in sanitary sewage.

D.. Stems, stem nuts, glands and bushings shall be made of bronze as specified in ANSI/AWWA Standard C515 latest revision with no Grades B or C bronze being utilized. The same items for valves made in conformance with C515 latest revision shall be made of the alloys specified above in the last paragraph of the "Gate Valves, General" section of this specification. The stem diameter shall conform to Table 4 of C515 latest revision. All valves shall be equipped with an ANSI/AWWA standard 2-inch square operating nut with skirt, or handwheel when required for above-ground service. Valve stems shall rotate counterclockwise to open. All valves 20-inch and larger shall be equipped with gearing conforming to AWWA standard. Bevel or spur gearing shall be supplied as ordered with no cost differential.

E. "O"-ring stem seals shall be neoprene, Buna-N, or approved equal. No natural rubber compounds will be acceptable. The stem seals shall be of design that permits the replacement of the "O"-ring seals while the valve is in service, without undue leakage.

F. All external ferrous items, except gray or ductile cast iron, shall be hot dipped galvanized in accordance with ASTM Standard A123, "Zinc (Hot-galvanized) Coatings on Iron and Steel Products", or ASTM Standard A153, "Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware", or Type 304 stainless steel.

G. Resilient seats shall be applied to the disc only and shall seat against a corrosion-resistant surface. The surface may be either metallic or nonmetallic, applied in a manner to withstand the action of line fluids and the operation of the sealing gate under long-term service. A metallic surface shall have a corrosion resistance equal to or better than bronze. A nonmetallic surface shall be in compliance with ANSI/AWWA Standard C550, "Protective Epoxy Interior Coatings for Valves and Hydrants". Resilient seats shall be bonded to the gate. No natural rubber products will be acceptable. If the resilient seat is a rubber material, the method used for bonding or vulcanizing shall be proven by ASTM Standard D429, "Test Methods for Rubber Property-Adhesion to Rigid Substrates", Method A or B. For method A, the minimum strength shall not be less than 250 psi. When Method B is applicable, the peel strength shall not be less than 75 lb/in. All exposed mechanical attaching devices and hardware used to retain the resilient seat shall be of AISI Type 316 stainless steel.

H. Flanged valves shall have ends faced and drilled conforming to ANSI Standard B16.1, Class 125. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerlines. Joint materials for flanged valves will be furnished with the valves.

I. Mechanical joint valves shall have ends complying with ANSI/AWWA Standard C111/A21.11, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings". Mechanical joint gaskets, glands, tee-head bolts and hex nuts shall be included with the valve. Segmented glands or follower glands held in place with set screws will not be acceptable. Bolt holes in the flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers. Valves for use in sewage shall have neoprene gaskets.

J. Painting and coatings shall conform to the requirements of Fed. Spec. TT-C-494a on exterior ferrous surfaces, and ANSI/AWWA Standard C550 for the interior of the valve. A coating shall be applied to all ferrous parts of the valves except for finished or seating surfaces. Surfaces shall be clean and dry before painting.

K. Testing: All production tests shall be performed on all valves supplied without exception. Operation, shell and seat tests shall be performed as specified in Section 6.2 of AWWA C509 latest revision and Section 5.1.2 of AWWA C515, latest revision as appropriate to the standard which covers the valve in question. An Affidavit of Compliance as specified in paragraph two of the "GATE VALVES, GENERAL", section above, shall be furnished to the MD-WASD with the invoice for the valves. Final payment (prior to installation in donations situations) by the MD-WASD will not be made until after receipt of these Affidavits of Compliance.

The gate valves shall conform to AWWA C515, latest revision standard as modified herein and as manufactured by American Flow Control, Mueller or approved equal.

L. Resilient Seated Gate Valves installed in the horizontal position with bevel gearing shall require a flushing port on the side of the valve to clean the tracks. See the Standard Detail WS 4.70 for piping and ball valve installation requirements.

2.03 TAPPING VALVES

A. Tapping valves shall conform to the applicable requirements for the gate valves specified above herein, and also with the requirements listed below.

B. With the valve open, an unobstructed waterway shall be provided, the diameter of which shall be at least the full nominal diameter of the valve, to permit taps to be made through the valve.

C. Tapping valves shall have a mechanical joint outlet end conforming to ANSI/AWWA Standard C111/A21.11-90, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings" or a flanged outlet conforming to ANSI Standard B16.1 Class 125 (as called for in the particular valve order), for connection to new piping and a flanged inlet with centering ring (for all valves of 12-inch diameter and smaller and for all larger valves where the manufacturer produces a centering ring flange in that size), for connecting to the tapping sleeve. For tapping valves 12-inch and smaller, the sleeve shall be in compliance with all applicable provisions of MSS Standard Practice SP 60, latest revision, as developed and approved by the Manufacturers Standardization Society of the Valve and Fittings Industry, 127 Park Street N.E., Vienna, Virginia 22180. For tapping valves larger than 12-inch, the connecting flanged joint between the tapping sleeve and the tapping valve shall be industry standard; however, the tapping valve must provide a matching fit with tapping sleeves by other manufacturers.

D. The tapping valves shall be furnished complete with all joint materials. Joint materials for the flanged inlets shall be ANSI-sized and approved and shall include 1/8-inch thick full faced gaskets and hot-dip galvanized carbon steel bolts and nuts with internal threads tapped or retapped after galvanizing or stainless steel bolts and nuts. The flanged inlet gaskets shall conform to the gasket material and property requirements set forth in ANSI/AWWA Standard C111/A21.11-90. All pipe connection gaskets for use in sewer applications shall be neoprene and natural rubber shall not be used in any application. Seal shall be neoprene, Buna-N, Nitrile, EPDM or approved equal, but not natural rubber. The mechanical joint outlets shall include the necessary joint materials conforming to the requirements of joint materials for mechanical joint ended gate valves of the appropriate type specified above herein (neoprene for use with sewer). Bolt holes in the flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers.

E. Valve operators for tapping valves 20-inch and larger shall be located to the right or left (when looking into the mechanical joint outlet end) as ordered by the City.

F. The valves shall be suitable for use with ductile-iron pipe conforming to ANSI/AWWA Standard C151/A21.51-96, "Ductile-Iron Pipe, Centrifugally Cast, for Water", with wall thickness and outside diameter as specified in Tables 3 and 4, (Special Thickness Classes) for the following sizes:

Size	Thickness Class
4-inch	54
6-inch	53
8-inch	52
10-inch and larger	50

and with wall thicknesses and outside diameter as specified in Tables 1 and 2 (Standard dimensions and weights) of the same standard.

Pressure Class Pipe (Potable, Reuse and Raw Water Only)

Size	Pressure Class
4-inch through 12-inch	350
14-inch through 20-inch	250
24-inch	200
30-inch through 48-inch	150

G. All production tests shall be performed on all valves supplied without exception. Operation and hydrostatic tests shall be performed as specified in AWWA C515, latest revision. An Affidavit of Compliance as specified in paragraph two of the "GATE VALVES, GENERAL", section above, shall be furnished if requested to the City prior to installation of the valves. Final payment (installation in donations situations) by the City will not be made until after receipt of these Affidavits of Compliance.

The tapping valves shall conform with the appropriate AWWA valve standard as modified herein and as manufactured by American Flow Control, Mueller or approved equal.

PART 3 - EXECUTION

3.01 GENERAL

All valves shall be installed in accordance with provisions of Section 15100, "Valves, General." Care shall be taken that all valves are well supported.

END OF SECTION

SECTION 16051

PUMP STATION ELECTRICAL MATERIALS

1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install all electrical material specified herein and required for a complete installation.

1.02 RELATED SECTIONS

A. Section 16940 - Pump Station Control Panel

1.03 QUALITY ASSURANCE

A. All electrical materials and equipment shall be new, of recent domestic manufacture, and approved by the Underwriters' Laboratories, Inc. Material or equipment damaged in the course of installation or test shall be replaced or repaired in a manner meeting with the approval of the Engineer.

B. All electrical material and installation shall comply with the following codes and standards:

1. National Electrical Code (NEC)
2. South Florida Building Code (SFBC)
3. National Fire Protection Association (NFPA)
4. Insulated Power Cable Engineers Association (IPCEA)
5. National Electrical Manufacturers Association (NEMA)
6. Institute of Electrical and Electronic Engineers (IEEE)
7. American Society for Testing and Materials (ASTM)
8. American National Standards Institute (ANSI)
9. Underwriters Laboratories (UL)

1.04 SUBMITTALS

A. Before any material or equipment is purchased, the Contractor shall submit complete shop drawings to the Engineer for approval, including a complete list in quintuplicate of electrical materials, fixtures and equipment to be incorporated in the work. The list shall include catalog number, diagrams, drawings, and such other descriptive data as may be required by the Engineer. Approval of material will be based on the manufacturer's compliance with the Specifications, published ratings, or on test results, where specified.

B. In addition, the Contractor shall furnish four copies, in booklet form, of complete installation drawings, instruction books, operating and maintenance manuals, parts lists for each major item of electrical equipment, and similar data on minor items of equipment, if requested by the Engineer, dimensional drawings, wiring diagrams and schematics for each major piece of electrical equipment.

2 PRODUCTS

2.01 GENERAL

A. All equipment shall be new, complete and in operating condition unless otherwise specified.

B. All components shall, whenever possible, be standard stock articles of well known domestic manufacturers, who have been regularly engaged in the manufacture of such material and equipment for at least five years.

C. Fusible equipment shall be equipped with fuses, and 100 percent of spare fuses of each type shall be supplied.

2.02 SURGE PROTECTION

A. Line-to-line and line-to-ground protection shall exceed the requirements of ANSI/IEEE Standard C62.1-1984 Sections 8.6.1 and 8.7.3 by a factor of at least 300%. Voltage clamping time shall be less than five nanoseconds with a maximum surge current of 30,000 RMS at a clamping voltage under 600 VAC. One arrestor, complete with circuit breaker disconnect is to be supplied on the incoming line to the control system. Arrestors shall be Ingram Products, Joslyn or approved equal.

2.03 PHASE MONITOR

A. Phase Monitor shall be a three-phase monitor and supplied on the incoming line. The phase monitor shall prevent motors starting on the following conditions: overvoltage, undervoltage, phase reversal, phase imbalance and loss of phase. The phase monitor shall have integral fault light and dry contact for alarm indication. The unit shall be ATC Diversified Electronics or approved equal.

2.04 GROUNDING, BONDING AND GROUND RODS

A. Ground Rod shall be a copper-clad steel rod, 3/4-inch diameter by 15 feet long, approved for that use.

B. Make inaccessible or underground connections with the exothermic welding process using equipment manufactured by Burndy or Erico Products.

C. Make accessible connections with multiple bolt silicon bronze connectors specifically designed and approved for the purpose. Connectors to be as manufactured by Burndy or O.Z. Gedney Electric.

D. Install grounding system as shown on Drawings and never use a neutral conductor as grounding or bonding means.

E. Drive ground rods full length into the earth. Main ground electrode system resistance to ground to be no greater than 3 ohms. Use as many rods as needed to attain this level.

F. Ground and bond panelboard frame, fittings, fixtures and devices, cable sheaths and screens, neutral of transformers, boxes and raceways, motor frames, non-current carrying parts of appliances and devices, control equipment and panels, and all other parts and equipment as required by the NEC.

G. Provide every branch circuit for power and lighting and each 120-volt receptacle circuits, with a green grounding conductor of the same size and type as the power conductors installed in the same raceway.

2.05 CABLE AND WIRE

A. Cable and Wire shall be plainly marked with the manufacturer's name, year of manufacture, and type of cable. All conductors shall be copper unless otherwise specified.

B. All cable shall be manufactured in strict accordance with the specifications and the applicable IPCEA, NEMA, IEEE, UL, and ANSI standards, by a manufacturer with at least 5 years of experience in cables of this type.

C. All cable and wire shall be suitable for wet locations.

D. All 600 volt class cable shall be Class B, heat and moisture resistant thermoplastic type THW rated 75° C, maximum conductor temperature in wet or dry locations, with copper conductors. No. 10 and smaller shall be single strand, No. 8 through No. 2 shall be 7 strand and No. 1 through 4/0 shall be 19 strand and 250 MCM through 500 MCM shall be 37 Strand. Insulation shall meet UL Standard 83.

E. All conductors shall be plainly marked on outer braid at least every two feet with name of manufacturer, size and grade of insulation.

F. Conductors shall be as manufactured by General Cable, Phelps Dodge, Okonite or approved equal.

2.06 CONTROL WIRING

A. Wiring for monitoring system and control shall be single conductor #14 AWG minimum, solid or stranded with THW or THWN insulation.

B. Wiring for analog or pulse systems shall be 3-conductor shielded cable with #14 AWG stranded copper conductors with individual thermoplastic color-coded insulation. Overall shield shall be either copper or aluminum tape providing 100% shielding coverage and provided with a stranded copper ground drain wire and an overall vinyl jacket. Cable shall be Belden, Dekoron or approved equal.

C. Fireproofing tape shall be Irvington No. 7700, or approved equal, applied in accordance to the manufacturer’s instructions.

D. Multiconductor cable shall be copper conductors, flame retarded ethylene-propylene insulated for 600 V with a 90ºC rating. The single conductors of the multiple conductor cable shall be color coded with integral color for proper

identification. Color coding shall be equal to ICEA S-68-514, Table K-2. Cable shall meet the requirements of IEEE-383. A heat, moisture flame and chemical resistant, mechanically rugged ethylene-propylene insulating compound, 30 mils thick, shall be provided for #14 AWG. Conductors shall be tin or alloy coated stranded copper as per ASTM B-8 and B-33 or B-189. Overall cable jacket shall be chlorosulfonated polyethylene compound over cable tape and fillers and shall exceed the requirements of ICEA S-68-516.

E. Connectors, Terminals and Splices:

1. Provide connectors, terminals and splices for all power and lighting circuits using 600-volt wire and cable as follows:

a. Provide connectors, terminals, and splices, for all wire, cable, and equipment and bus connections that are designed and approved for the specific type and size of conductors being connected.
b. Connectors and terminals shall be designed and UL approved for use with the associated conductor material, and shall provide a uniform compression over the entire contact surface. Solderless terminal lugs shall be used on all stranded conductors.
c. Pressure-crimp type connectors, terminals and splices shall be applied with a mechanical or hydraulic tool with proper size crimpling dies for making each connection. The tool shall be of the type that will not release until the correct pressure has been applied.
d. Splices and taps in wire No. 10 AWG, and smaller, shall be made with approved, wire-nut-type, patent spring connectors. Use 3M Scotch-locks or equal.
e. Provide Burndy, type YAV box, or equal, pressure-crimp ring-tongue terminals for termination of No. 8 stranded cable.
f. Provide Burndy type YSV box butt splices, or equal, for splicing No. 8 AWG stranded cable.
g. For termination and splicing of cable of AWG No. 6 or larger, provide long-barrel, type YA pressure-crimp lugs and type YS tubular pressure-crimp splices by Burndy or equal. Use long-barrel pressure-crimp lugs wherever space conditions permit. Use long-barrel pressure crimp splices exclusively for splicing. Where space is inadequate for use of long-barrel lugs, provide Burndy Type YA-L, pressure-crimp, short barrel lugs, or equal. Use two-hole lugs on cable of 250 MCM and larger.
h. For tap off AWG No. 8 cable and larger, provide Burndy type KS split-bolt copper connectors (bugs), with Burndy type SC one-piece plastic split bolt covers, or equal. Other types of connectors for tapping may be used subject to prior approval by the Engineer.
i. Use proper size bronze bolts, nuts, washers, and lock washers of Burndy Durium alloy, or equal, for bolting cable terminations to equipment terminals and bus bars.
j. Termination of solid wires of AWG No. 10 and smaller at

terminal blocks shall be made by forming the wires in a ring to fit under a screw head, thus requiring no terminal lug.

2. Provide terminals and splices and make connections in control, alarm and instrumentation system as follows:

   a. For solid wiring provide type TP, vinyl-insulated, ring-tongue terminals by Burndy, or equal, for all terminations.
   b. In locations where splicing of solid wire is indicated or permitted by specifications, use type SP vinyl-insulated, butt splices by Burndy, or equal.
   c. Wire terminals shall be installed with pressure tools equal to those manufactured by American Pamcor, one of which is No. 59072, which obliges the Electrician to apply the correct pressure required to produce a tight connection before the tool is released. Use a pressure tool designed for the specific size of connector and wire being terminated.
   d. Taps in solid wire may be made with 3M, Scotchlock wire nut, or equal, except that the conductor being tapped shall not be cut, and shall be twisted together with the tap conductor before wire nut application.

2.07 LUGS

A. All power cables of any voltage class shall be terminated with tinned copper indentation-type lugs. The lugs shall be Bundy type YA, T & B, or equal, long barreled, with double indentations in the larger sizes. Two-hole lugs shall be used where possible. The Contractor shall be responsible for compatibility between hole size and spacing on the lugs and on the equipment furnished.

B. Terminate stranded conductors on mechanical connectors furnished on equipment. Where no connectors are included, provide suitable mechanical connectors.

C. Termination of stranded conductors on screw terminals will not be permitted. Provide suitable size compression or mechanical type connector with spade tongue.

2.08 PULLING COMPOUND

A. Pulling Compound, if used, shall conform to the recommendations of the wire and cable manufacturer.

2.09 CONDUIT, FITTINGS AND WIREWAY

A. Conduit shall be heavy wall, threaded, rigid, metallic conduit. PVC schedule 40 conduit shall be used where it is embedded in concrete and/underground runs, and aluminum conduit shall be used for exposed runs. Use PVC coated rigid steel conduit for risers and transitions from underground PVC conduit to above-ground conduit seals. Use galvanized rigid steel conduit above conduit seals. Conduit, fittings and wireway shall be sized in accordance with the National Electrical Code, where sizes are not shown on the Plans. Conduit smaller than 3/4-inch shall not be used.

1. Galvanized Steel Conduit shall be hot-dip galvanized, inside and outside, after threading, and shall conform to Federal Specification WW-C581, ANSI C80.1 and UL 6.
2. PVC Coated Steel Conduit shall be externally coated with a 40 mil of grey PVC per UL 6.
3. Aluminum Conduit shall contain less than 0.1 percent copper, and shall conform to Federal Specification WW-C-540C. It shall be as manufactured by Kaiser Aluminum and Chemical Corporation, Triangle, or approved equal. Alcoa thread lubricant shall be used on all aluminum threads.
4. Flexible Conduit shall be "Sealtite" flexible, liquid tight conduit, as manufactured by the American Brass Company, Bridgeport, Connecticut, the equivalent by 0-Z/Gedney, or equal.
5. PVC Conduit shall be Schedule 40, heavy-walled rigid, rated for 90 degree C cables conforming to UL 651, Fed Spec W-C-1094 and NEMA TC-2 as manufactured by Carlon or approved equal.
6. Conduit Fittings and Device Boxes embedded in concrete shall be PVC conforming to UL 514 and NEMA TC-3.
7. Wall Sleeves for Conduit shall be O.Z., positive, watertight through wall entrance fittings, FSK Series, Crouse-Hinds, or equal.
8. Entrance Seals shall be O.Z. type CSBG, Crouse-Hinds, or equal.
9. Rigid Conduit Straps and Clamp Backs of cast aluminum such as EFCOR 233 AL, Appleton, or equal, shall be used in attaching conduit to concrete surfaces where channels and clamps are not used.
10. Conduit Bushings shall be insulated metallic bushings by T & B, O.Z., or approved equal, except where grounding bushings are required.
11. Conduit Sealing Fittings shall be Crouse-Hinds, type GUAB, with sealing covers, or approved equal.
12. Wireways shall be of the size required plus no less than 50% of spare capacity, made of 12 gauge aluminum with hinged spring-latched covers conforming to UL 870, and painted to protect against corrosion. The Contractor shall furnish all necessary bends, couplings and connectors. Interior parts shall be smooth, free of sharp edges and burrs. Use grounding type locknut and copper bond wire to make wireway and attached conduits electrically continuous. Slip-fasteners are not acceptable for this purpose. Wireways shall be type HW as manufactured by General Metals, Inc., Square D, or approved equal.

2.10 SWITCHES AND COVERS

A. Light Switches shall conform with Fed Spec WS-896E and shall be rated 20 amp, 120/277 volt AC, for tungsten or inductive load, Hubbell 1221 and 1223, Leviton, or approved equal.

B. Weather proof Switch Covers shall be Crouse-Hinds DS185-SA, Appleton, or approved equal, copper-free aluminum.

C. Explosion-Proof Switches shall be rated 20 amp, 125 volts AC with front operating handle, Appleton Cat. No. EFS175-FL, Crouse-Hinds, or approved equal.

D. Safe-Run Switches shall be 2 position, double pole, single throw, maintained contact, selector switch in NEMA-4 enclosure, General Electric AJ201C or approved equal.

E. Safety Disconnect Switches shall be heavy duty Type A, quick-make, quick-break, horsepower rated, with external operating handle interlocked to prevent opening of the cover unless it is in the "off" and "open door" position. Switch shall be manufactured by Square D, Westinghouse, or approved equal.

F. Mercury Float Switch shall have molybdenum contacts sealed in a doublewalled float of plastic material resistant to inorganic salt solutions, alkalis, and mineral acids. The electrical cable shall be two conductors with neoprene jacket and shall run unspliced to the Control Cabinet. Switch shall be Enpo-Cornell Pump Co. or equal.

G. Limit Switch shall be heavy duty Square D Class 9007 or approved equal with 2 N.O. and 2 N.C. contacts.

2.11 RECEPTACLES AND COVERS

A. Outlets shall be 125 volt, 20 amp, grounding type, duplex receptacle specification grade, Hubbell 5362, Leviton, or approved equal.

B. Weatherproof Switch Covers shall be Crouse-Hinds DS185-SA, equivalent by Appleton, or approved equal, copper-free aluminum, gasketed cover.

C. Receptacle for Emergency Power shall be 4 wire, 4 pole with angle adapter and screw cover, Russell Stoll, Catalog numbers as indicated below for the different services, or approved equal:

1. JRSA 2034 DR45 for 240 volts
2. JRSA 2034 HR45 for 480 volts

D. Ground Fault Protected Receptacles shall be Class A, 120 Volt, duplex 20/20A NEMA 5-20R, Square D Catalog GDFR-120BC or approved equal.

2.12 PANELBOARD

A. Panelboards shall be dead front, safety type construction and shall conform to Federal Specification WP-115, NEMA PB1, ANSI C33.38 and UL67.

B. All circuit breakers shall be thermal magnetic, temperature compensated, bolt-on type with quick-make quick-break mechanism, of the frame and size indicated.

C. Circuit breakers minimum interrupting ratings shall be 22,000 A for 277 volts systems and 14,000 A for 120 volt systems. Circuit breaker minimum rating shall be 20A single pole unless otherwise noted.

D. The panel board shall be provided with the voltage, phases and amperage required per project drawings, with main and branch breakers ambient-

compensated. It shall provide for a minimum of 20% spare space. Panels shall have neutral and equipment grounding bus and shall be Square D, General Electric, Westinghouse or approved equal.

E. Install panelboards in accordance with manufacturer's instructions.

2.13 PUMP MOTOR CONNECTION BOX

A. Pump motor connection box shall only be used in submersible pump wet well applications. The Contractor shall furnish and install 24" x 18" x 8" NEMA 4X stainless steel enclosure with hinged bolt-on cover and all necessary appurtenances for a complete installation. Connection box assembly shall include 3' x 3' x 6" concrete slab and 1-5/8 x 1-5/8 unistrut support. The following shall also be included:

1. 6-Pole power insulated terminal block panel mount shall be Allen Bradley Bulletin 1492, sized as required.
2. 6-Circuit control insulated terminal block panel mount shall be Allen Bradley Bulletin 1492
3. Gland nut and neoprene bushing shall be Crouse-Hinds CGK, or approved equal, sized as required for cable outer diameter.
4. Conduit Seal.

2.14 TRANSFORMER

A. Transformer shall be 480 volt to 120/240 volt, single phase, 60 hertz, 3KVA for submersible stations. It shall be high efficiency Sqaure "D" Model 9070E01D1, or approved equal, with two 5% taps below normal, weatherproof for indoor or outdoor service.

2.15 PULL BOX

A. Pull box shall be welded aluminum, 12 gauge, with hinged cover, minimum dimensions of 12 inch x 12 inch x 6 inch, without knockouts, anodized and painted, as manufactured by General Metals, Inc., Hoffman, or approved equal.

2.16 LIGHTNING ARRESTOR

A. Lightning arrestor shall be 3-pole, 650 volt, thyrite secondary arrester, General Electric type 9L15BCC008, Westinghouse 634A217AO1, or approved equal.

2.17 SURGE CAPACITOR

A. Surge capacitor shall be a 3-pole, 650 volt, 1.0 mfd. capacitor. It shall be a General Electric Type 9L18ABB301, equivalent by Westinghouse, or equal.

2.18 EMERGENCY LIGHT

A. Furnish and install wall mounted emergency light package unit with battery backup wired to an existing lighting fixture, Hubbel Lighting IMF 12-50-2-

P8 or approved equal.

2.19 LEVEL CONTROLLER

A. Level controller shall be microprocessor based SCADA ready, station controller with float switches backup. It shall measure the depth of water in the wet well and operate the pumps based on selected setup values. The controller shall be a microprocessor-based device and not require a battery to maintain the operating program. All set-up values shall be stored in non-volatile memory.

B. The controller shall be standard “off the shelf” equipment with published literature and fully tested hardware and operating program. The controller shall be field configurable from the front of the unit, and require no special tools or software to set-up or operate.

C. MPE Station Controller, microprocessor based controller with pressure transducer, Model SC2000, as manufactured by Motor Protection Electronics, Inc. or approved equal.

D. Provide intrinsically safe duplexer backup controller with float switches, as manufactured by Motor Protection Electronics Inc. or approved equal.

2.20 PUMP STATION LEVEL TRANSDUCER

A. A submersible level transmitter shall be capable of sensing and measuring the level of wastewater in the wet well based on the hydrostatic pressure above the submerged sensor’s diaphragm.

B. The level transmitter shall be factory calibrated to a nominal 4-20 mADC output.

C. The transducer housing shall be fabricated of PVC with a 2.5-inch diameter Teflon diaphragm and shall be filled with silicone oil.

D. The sensor shall be mounted using its signal cable and have ¾” NPT pipe threading for pipe mounting.

E. The internal air pressure of the sensor assembly shall be relieved to atmospheric pressure through a sealed breather system.

F. The unit shall measure 9 inches high by 3.8 inches diameter. The cable diameter shall be 0.26 inches.

G. The level transducer shall be Model SLX 130-M, as manufactured by Contegra, Inc., or approved equal.

H. The mounting option used shall be a 316 SS pipe for cable suspension (SLX-SP1 Contegra Option 3).

PART 3 EXECUTION

3.01 GENERAL

A. All electrical work shall comply with the applicable rules of the National Electrical Code, the National Fire Protection Association, and the South Florida Building Code, and shall be in accordance with the requirements of OSHA, and the best commercial and industrial practice. Conduit and cable shall be sized as specified in the National Electrical Code, where sizes are not shown on the Plans.

B. All electrical wiring, regardless of voltage classes, shall be installed in rigid conduit, except where shown otherwise on the Plans. No conduit installed shall be smaller than 3/4 inch IPS and no wire smaller than 12 gauge, except as otherwise shown on the Plans, specified herein, or authorized by the Engineer.

C. In some cases, the exact requirements must be determined from the shop drawings of the equipment furnished by the Contractor. Changes required by the Contractor - furnished equipment shall be the Contractor's responsibility. Materials or equipment damaged in the course of installation or test shall be replaced or repaired to the satisfaction of the Engineer.

3.02 EXAMINATION

A. Verify items provided by other sections of Work are properly sized and located.

B. Verify that built-in items are in proper location, and ready for roughing into Work.

C. Electrical service shall be built per Florida Power & Light Standards.

3.03 INSTALLATION OF 600-VOLT WIRE AND CABLE

A. Install wire and cable in conduits, ducts, wireways, cable trays and other enclosures as indicated.

B. Except as otherwise indicated or specified, all wire and cable shall be installed in continuous runs between terminal points without splicing.

C. Make splices and taps only in junction boxes, from terminals in terminal boxes, in manholes, in handholes and other accessible enclosures.

D. Do not splice wire and cable in ducts or conduits.

E. Except as otherwise indicated, or specified, do not splice or tap control, alarm or instrumentation wiring in underground manholes and handholes.

F. When pulling wire or cable, do not subject the wire or cable to a tension greater than 50% of the yield strength of the conductor. Pulling lugs shall be attached to the conductor with a sleeve or grip over the cable sheath to prevent slipping the insulation.

G. Use a UL approved lubricant to decrease friction when pulling cable in

ducts and conduits

H. Do not subject cable to a bending radius less than 8 times the cable O.D. during or after installation.

I. In wet locations, make splices first as for dry locations, then encapsulate them in an epoxy resin sealing and potting compound. Encapsulation of compression sleeve splices shall be with preformed molds.

J. Pulling of wires and cable into conduits shall be done in a manner which will in no way injure the insulation.

K. All wires in conduit shall be continuous between pull points without splices. No joints or splices in the conductors shall be permitted except at outlet or accessible junction boxes.

L. Sufficient lengths of wire shall be left at pull boxes for connecting to equipment and apparatus without straining.

M. All wires passing through pull boxes shall have enough slack in each box so they may be pulled out of the box a distance of no less than 6" across the entire length of the box.

N. Pull together all cables or conductors to be installed in a single conduit.

O. Wire Sizes: Drawings indicate wire and conduit sizes for typical equipment. If sizes shown on the drawings are not appropriate for the equipment chosen by the Contractor, wires and conduit shall be sized for the proper current-carrying capacity (including voltage drop and motor inrush allowances) in accordance with the NEC, at no extra cost to the Department. On 120/240 volts systems, "Homeruns" of over 50 feet in total length from panel to first outlet shall be #10 AWG minimum size and on 277/480 volts, the distance shall be 100 feet total length for #12 AWG minimum size.

3.04 CONDUIT INSTALLATION

A. The Plans are generally indicative of the work to be installed, but do not show all bends, fittings, boxes, and specialties which may be required or the exact location of all conduits. The Contractor shall carefully investigate the site and conditions affecting all of his work and arrange his work accordingly. Any changes from locations shown on the Plans must be approved by the Engineer.

B. Conduits shall be installed in such a manner that wires may be removed and replaced at a later date and to ensure against collection of condensation or rainwater. Where bends are made, they shall be made with an approved conduit bending machine. Crushed or deformed conduit shall not be used.

C. All conduit ends shall be square cut and reamed to remove burrs. Running threads will NOT be permitted. Approved couplings shall be used. All conduit joints shall be made up wrench tight, using strap wrenches, and shall be made waterproof in such a manner as not to interrupt the electrical bonds.

D. As soon as installed, all open conduit ends, including those terminating in boxes, shall be plugged or capped and so maintained during construction to prevent the entrance of moisture and dirt. All conduit shall be carefully cleaned and dried inside before the installation of wire.

3.05 GROUNDING

A. All grounding shall comply with the requirements of the National Electric Code and all local Codes having jurisdiction.

B. Unless otherwise shown on the Plans, the ground system shall be composed of at least two 5/8" in diameter by 10 feet long copper clad ground rod, spaced a minimum of 6 feet apart. Ground rods shall also be connected to rebar in slab. Make all connections with #6 bare copper wire.

C. Maximum ground resistance shall not exceed 25 ohms under normal dry conditions. Additional ground rods shall be driven if required to maintain this level.

D. All electrical equipment, structural steel, guard rails, and other metallic objects shall be connected to the above-mentioned ground system.

E. Provide a warning ribbon installed at 12" depth in the ground above the ground loop conductor.

3.06 NEUTRALS

A. Each circuit which requires a neutral conductor shall have its own individual neutral conductor, contained in the same enclosure.

3.07 TESTING

A. All circuits and motors shall be megger tested, and the voltage and current load on each circuit shall be checked. Five copies of the results shall be furnished to the Engineer and the Department before acceptance of the work.

END OF SECTION

SECTION 16780

S.C.A.D.A. SYSTEM R.T.U. INSTALLATION

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. All conditions of the existing contract shall apply.

B. The Contractor shall coordinate all work with the local Electrical Supervisor for the area. The Contractor shall review the installation with the area Electrical Supervisor before starting the work. The installation shall be completed and inspected by the local supervisor or his representative.

C. The Contractor shall be responsible for location of all utilities.

1.02 REFERENCE STANDARDS

A. All work shall be in accordance with the Florida Building Code and the National Electrical Code.

PART 2 - PRODUCTS

2.01 MIAMI-DADE WATER AND SEWER DEPARTMENT SUPPLIED MATERIALS

A. R.T.U. in a NEMA 4X enclosure. Note that batteries are to be furnished and installed inside the 4X enclosure by the contractor.

B. Radio

C. Antenna with mounting cap and cable

D. Force main pressure transmitter assembly consisting of a 1-inch diameter threaded nipple, manifold with test port and pressure gage with isolation diaphragm and the pressure transmitter unit.

E. Low level pressure switch

F. Wet well level transformer (for the RTU)

G. Current transformer

H. Amp transmitter

I. “Station Flooding”(drywell) and “High Level”(wetwell) float switches; Mini Float,

model SM N.O.

J. “Low Level”(wetwell) float switch; Mini Float, model SM N.C.

K. “Intrusion Alarm” , Square D 9007 Series A, Type C54D, Type C54RC, Type C54A2, Microswitch #MC7711-BZ-2R-A2 or equal as required for that type of installation.

2.02 CONTRACTOR SUPPLIED MATERIALS

A. Unless otherwise specifically called out elsewhere herein, all other labor, materials and equipment required for SCADA System R. T. U. Installation will be provided by the Contractor whether or not said items are specifically called out in the Contract Documents.

B. Individual wires shall be 600 volt, 75° C insulation, 14 guage stranded copper. Ends shall be terminated with compressiron lugs. Wires shall be color coded according to Miami-Dade Water and Sewer Department supplied drawings and identified by wire marking labels. Any circuits designated as “spare” shall each have individual ends securely taped and marked “spare”.

C. Shielded multi-conductor transducer wire shall be Belden twisted #16 stranded copper with shield, 600 volt rated. The shield shall be terminated at the R. T. U. end only. Shield shall be cut back to insulation and taped at other end. Shielded wire shall be run in a raceway with no other power circuits.

D. The antenna ground rod shall be copper weld 3/4", 10 feet long and driven by the Contractor.

E. Tapping saddle assembly for pressure transmitter consisting of: solid brass, single strap (silicon bronze), tapping saddle with Buna-N-gasket, Ford Style 101B with 1-inch tap; brass corporation stop with 1-inch inlet, outlet and valve AWWA/CC taper thread inlet by flare copper outlet, Ford FB600-4; brass adapter for flare copper connection (replaces flare nut) 1-inch female copper thread x 1-inch female iron pipe thread, Ford part no. C01-44. All items specified as brass shall be ASTM B-62, UNS C83600 allow and shall conform with NSF 61.

PART 3 - EXECUTION

3.01 ANALOG INPUTS

A. Three transducers are involved at each site with standard or microprocessor control (current, wetwell pressure level, and force main pressure). The pressure transmitters will be installed by MD-WASD forces in coordination with, and as a part of, the Contractor’s permitted work. The Contractor shall mount the current transformer on the leg of the power cable from which the control power is derived and connect shielded wiring to all three transducers. The current

transformer shall be installed to indicate power used whether on normal or generator power where applicable. The current transducer shall be installed in existing cabinets as close as possible to the current transformer.

B. At sites identified by the City only two types of transducers, (force main pressure and current), will be used. Shielded wire from the level logic control device to the R. T. U. shall be installed for level indication. Termination of the shielded cable to the control unit shall be performed by the City forces.

C. Other analog inputs may include flow recorders, suction pressure, discharge pressure, vibration or R. P. M. input. The MD-WASD shall supply devices and the Contractor will supply and install circuits. These circuits will be installed by the Contractor, but terminated by MD-WASD forces.

3.02 ANALOG OUTPUTS

A. At sites determined by MD-WASD shielded wire and conduit shall be installed for analog outputs such as VFD speed control, valve control, or other positioning devices. Circuits shall be installed by the Contractor, but terminated by MD-WASD.

3.03 DISCRETE INPUTS

A. Feedback signal circuits are “Pump On”, “Station Flooding” (drywell), “High Level” (wetwell), “Low Level” (wetwell), “Generator Run”, “Intrusion Alarm” and “Common Alarm”. Except where noted, the Contractor shall provide all materials and devices to complete these two wire circuits. The power will be from the R. T. U. and all devices shall be normally open in the safe or off condition.

1. “Pump On” shall be provided by a Contractor furnished and installed auxiliary contact on each pump motor starter. (Note: two speed pumps require two per pump.) No other devices shall be used to indicate “Pump On”.
2. “Station Flooding” (drywell), “High Level” (wetwell), and “Low Level”(wetwell), shall be supplied by MD-WASD and installed by the Contractor. In pump stations with pneumatic controls (bubbler system) MD-WASD will provide a pneumatic pressure switch for “Low Level”(wetwell) to be installed by the Contractor.

3. “Intrusion Alarm” will be supplied by MD-WASD and installed by the Contractor.

3.04 DISCRETE OUTPUTS

A. Active control circuits to start each pump, (or each speed), stop pump, and reset alarms shall be installed and connected.

1. The normally closed stop relay in the R. T. U. shall be connected in series to the existing stop control circuit.
2. The normally open start relay shall be connected in parallel to the existing auto start control circuit. **No existing safety or process orderly shutdown circuits shall be bypassed or defeated for either the start or stop control circuit.**
3. The “Common Alarm” circuit shall be from a normally open R.T.U. relay in parallel with the existing reset switch.

3.05 R. T. U.

B. There shall be no holes or entrance of any type into the top of the R.T.U. enclosure.

C. The R. T. U. shall not be mounted below grade or inside the drywell. If existing structure does not provide mounting for the R.T.U. a separate MD-WASD approved stanchion shall be constructed and installed by the Contractor. The R.T.U. stanchions shall be installed in accordance with current MD-WASD approved S. C. A. D. A., R. T. U. installation drawings. Equivalent parts shall require approval by the S.C.A.D.A. Section representative.

D. All abraded galvanized hardware shall be cleaned and then recoated with two coats of cold galvanized compound.

3.06 CONDUITS

A. Rigid galvanized conduit shall be used in all exterior below grade installations. It shall be coated with two coats of Bitumastic No. 50 or equal. Rigid galvanized conduit shall extend completely through all concrete penetrations at which point it may be converted to PVC conduit in the interior of the drywell. Rigid aluminum conduit may be used in installations above grade where exposed.

B. All concrete penetrations shall be sealed with epoxy grout compound. All conduits shall have minimum 1/4" spacing where installed on concrete surfaces.

C. All conduits below grade and/or extending from the wetwell shall have seal off fittings installed before entry into the R. T. U. enclosure. All conduits shall be sealed with duct seal compound during the construction phase to limit the exposure of electronic circuitry to corrosive atmosphere.

3.07 MISCELLANEOUS

A. A separate circuit shall be provided for and installed by the Contractor from the existing lighting/control panel, to provide 120 VAC power to the R. T. U. This circuit shall be routed through an available phase monitor relay normally open contact. This circuit will be switched on by the SCADA Section at start-up.

B. For wetwell/drywell pump stations with the pump controller in the drywell a MD-WASD supplied enclosure and terminal strips shall be installed for circuits entering and exiting the drywell.

C. Additional work such as sidewalk or street cutting may be required. This work must be authorized by the Project Manager and validated by a detailed, itemized invoice showing exact labor and material used.

D. An as-built drawing, (schematic and point-to-point) of the final installation and approved by the SCADA representative shall be provided by the Contractor for the installation before final payment is made.

E. A Certificate of Completion and original approved permits shall be supplied to the Department before final payment is made.

F. Install SCADA tapping saddle at location shown on Plans, pressure test, perform 1-inch tap, in coordination with MD-WASD forces, connect remainder of pressure transmitting system, and test.

END OF SECTION

SECTION 16940

PUMP STATION CONTROL PANEL

PART 1. GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install a pump station control panel, which shall include the level controller, relays, switches, lamps, and all electrical material specified herein or required for a complete installation.

B. The contractor is responsible for the erection, installation and start-up of the equipment covered under these specifications.

1.02 RELATED SECTION

A. Section 16051 - Pump Station Electrical Materials.

1.03 QUALITY ASSURANCE

A. All electrical materials and equipment shall be new, of recent domestic manufacture, and approved by the Underwriters' Laboratories, Inc. Material or equipment damaged in the course of installation or test shall be replaced or repaired in a manner meeting with the approval of the Department. Further, said repairs or replacement shall be performed by personnel qualified such that the UL approval will not be lost. The Contractor shall provide satisfactory evidence of these qualifications to the MD-WASD prior to the work being performed.

B. All electrical material and installation shall comply with the following codes and standards listed in Section 16051, Subsection 1.03.

C. Furnish equipment designed, built and tested by a firm with at least ten years of experience manufacturing this type of equipment.

D. Comply with NFPA 70, “National Electrical Code,” for components and installation.

E. Furnish equipment that bear the UL label.

1.04 SUBMITTALS

A. The Contractor shall provide all submittals in accordance with Section 16051, Subsection 1.04

B. Submit for review, properly identified manufacturers’ literature and shop drawings including but not limited to the following:

1. Dimensioned outlined drawings (Plan and Elevations).
2. Itemized bill of materials.
3. Manufacturers’ literature and shop drawings for every piece of equipment mounted on the panel.

4. Enclosure construction details.
5. Operating and maintenance manuals.
6. Detailed external wiring diagram and sequence of operation.

PART 2. PRODUCTS

2.01 GENERAL

A. The Control Panel shall be designed and built as integrated, pre-wired equipment. It shall control the operation of number of pumps in the station, based on the level in the wet well.

1. Level controller (specified in Section 16051, Subsection 2.19) shall monitor the wet well level and actuate the sewage pumps in sequence with rising water level. Once a pumping cycle has started, it shall continue until the stop level is reached. All start/stop levels shall be adjustable, based on design levels shown on the Plans. Controller shall maintain level to within ± 1% of full scale (i.e. maximum depth).
2. The level controller shall have a 3-position selector switch for manual selection of pumps sequence. An alarm shall be annunciated whenever the lag pump is called on, indicating failure of lead pump.
3. The Panel shall include the level indicator and pumps alternators, motor controllers, relays, switches, lamps, pressure switches and any other device shown on the Plans, or required to function as specified. Shop drawings of every device shall be submitted and approved before the panel is assembled.
4. Phase monitor relay shall be Timemark Model 258, Potter-Brunfield CPS-38, or approved equal, fused on line side and disconnect only for 3-phase equipment.
5. Selector switch to manually select or automatically alternate position of "lead" and "lag", sewage pumps after each pumping cycle shall be furnished and installed.
6. The manufacturer of the control system shall be certified by the Underwriters Laboratories (UL) as a UL 698A listed system panel manufacturer certified to install serialized label for quality control and insurance liability considerations.

B. Each major component shall be identified by an engraved phenolic nameplate.

C. All wiring shall be a flexible, stranded type and each conductor shall be tagged and numbered according to wiring diagrams and neatly tied.

D. The Control Panel shall be dimensioned to facilitate maintenance.

2.02 ALARMS

A. Control panels shall be capable of reporting, a minimum, of the following alarm points:

1. Dry Well High Level (Float switch).
2. Wet Well High Level.
3. Wet Well Low Level (With auxiliary contact to stop sewage pumps.)

4. Level Controller Failure.
5. Sewage Pump High Temperature or Failure (with pump shut down, lock out relay and reset push button.)
6. Loss of Phase Voltage.
7. Sump Flood (Dry well only).

B. Provide three spare alarm points and one set of N.O./N.C. contacts from common alarm relay for remote signaling. Every alarm shall be indicated by a labeled red pilot light mounted in the control panel. A red light with guard protector, as Series VDA manufactured by Crouse-Hinds, or approved equal and a bell with silencing buttons shall be mounted in the service enclosure. The alarm lights shall remain "on" until alarm signal is reset at control panel.

2.03 MOTOR STARTERS

A. Motor starters shall be sized as indicated on the drawings, with overloads to match the supplied motors. One set of N.O/N.C. spare contacts shall be provided in the sewage pump starter. Motor starters to be Siemens, Square D, Cutler Hammer, or approved equal.

B. Starters for sewage pumps shall be three-phase, sized in accordance with the following table:

NEMA SIZE STARTER			
Motor Size (Horsepower)	Single Phase 240 Volt	Three Phase 208 Volt	Three Phase 480 Volt
Up to 5	2	1	1
7½	2	2	1
10	-	2	2
15	-	3	2
20	-	-	2
25	-	-	3
30	-	-	3
40	-	-	3
50 to 75	-	-	4
100 to 150	-	-	5

2.04 CONTROL PANEL ACCESSORIES

A. All wiring shall be a flexible, stranded type and each conductor shall be tagged and numbered according to wiring diagrams and neatly tied.

B. All external wiring shall terminate in a terminal block, Square D Type G class 9080, or equal.

C. Relays shall be socket-mounted for ease of replacement, Square D Type K Class 8501, or equal.

D. Lamps, push bottoms, and switches shall be heavy duty oil-tight/watertight, Square D, Type K Class 9001, or equal.

E. Elapsed time meters shall be provided to indicate total running time of each sewage pump in "hours" and "tenths of hours". Meters shall be Eagle Signal Series HK or approved equal. An extra elapse time meter shall be furnished and installed to indicate the total time for all pumps simultaneous run.

2.05 LEVEL CONTROLLER

A. As specified in Specification Section 16051.

2.06 TELEMETRY

A. Telemetry (RTU) provided by the City shall be installed by the Contractor in its own weather-proof and corrosion-resistant enclosure separate from the control panel enclosure. The manufacturer of the control system shall provide the hardware required to interface the controller with the City SCADA System to remotely start-stop the pumps and monitor the operation of pumps and alarms.

2.07 CONSTRUCTION

A. Outside panels shall be gasketed, NEMA 3R, free standing, stainless steel, 12 gauge minimum construction, with same material continuous hinges and dead front anodized aluminum inner door. Finishing of the enclosure to be No. 2B. Padlocking of motor circuit breakers shall not obstruct the closing of the inner doors.

B. Inside panels shall be NEMA 12, constructed of .080 inches thick anodized aluminum or 14 gauge 316 stainless steel. Control wiring shall be color coded (minimum of 16 different colors), 16 gauge, 600 volts, 90 degree C. standard tinned copper, PVC insulated with crimped terminal connections.

C. Enclosure shall be approximately 48" W x 48" H x 12" D. The top of the panel shall stand no higher than 72-inches from the top of the support concrete pad. In any case, it shall be sized to facilitate maintenance of enclosed equipment with a double door. Total length of the enclosure will depend on the size of the pumps but shall be sized to provide enough space so that every piece of equipment can be easily reached for service and maintenance. The outer doors shall be furnished with a locking latch and staple for padlock, to be furnished by the City. All hardware shall be stainless steel. Provide every outer door with a limit switch to trip a remote alarm in case of unauthorized opening. Panel seams shall be continuously welded and ground smooth. All exterior joints shall be ground level and polished smooth. Stiffeners shall be added to panel sides and doors as necessary to ensure rigidity. Lifting eyes and a rolled lip around

three sides of the outside doors shall be provided. Provide also a rain shield over the generator outlet or access opening. Enclosure shall be 12-inches deep minimum.

D. The double doors shall be made of the same material as the enclosure. All edges of the doors shall be folded inward, similar to the cabinet to form a rigid non-flexing door. The door shall be hung on a continuous stainless steel hinge with stainless steel bolts and nuts. The door shall be equipped with a three-point locking latch, a handle and a heavy-duty stainless steel staple for a padlock. Provide a friction type latch on hinge side to keep the door in position desired and to keep it from being closed by the wind.

E. Cabinet anchorage shall consist of chemical adhesive anchor cartridge system 5/8" φ, minimum, stainless steel anchor threaded rod with 5-1/2", minimum, depth of embedment. The cabinet shall be secured to the concrete base at a minimum of four locations.

F. An external red LED strobe light, vapor tight with aluminum lens protector shall be mounted on a side of the enclosure. The voltage of the strobe light shall be 120 Volts AC and will flash on an alarm condition. The strobe light will continue to flash after the alarm silence button is pressed until the alarm condition has cleared.

G. The alarm bell shall be 120 volt A.C., 6 inches diameter, 90 db, weatherproof with protecting guard. Bell shall be Simplex Series 4090 or approved equal.

H. A cast or stamped plate, with the legend "Miami-Dade Water and Sewer Department, Tel. (305) 274-9272" in characters a minimum of 2-inches high, shall be firmly attached to the upper portion of the door by welding or tamper-proof bolting.

I. Provide stainless steel weather and sun shield welded to top of panel enclosure as shown on drawings if Variable Frequency Drives (VFD) or Soft-Start equipment are included and located within the enclosure. Shield shall be factory installed.

J. All hardware including hinges, 3- point latches and handles shall be corrosion-resistant metal.

K. Make all punching, reaming, cutting and other fabricating work before any finish is applied. Prior to painting, clean, degrease and phosphate-clean all panels. Final finishing, not less than three coats of semi-gloss polyurethane paint applied over a rust inhibitor primer. Panel interior to be white, with exterior surfaces of light gray ANSI-61.

L. Provide print pocket inside the panels to hold detailed wiring and interconnecting diagrams. One copy of the relevant drawings shall be provided and placed in these pockets.

M. Wiring to be stranded copper with 600 volt rated thermoplastic insulation. Power wiring shall be No. 14 AWG and control wiring No. 16 AWG minimum. Electronic signal wiring shall be No. 18 AWG twisted and shielded pairs.

Wiring shall not be spliced. Wiring shall be tagged for identification with printed wire sleeves or self-stick labels.

1. Color Coding to be as follows:
   a. Black: AC hot (line feed and load circuits).
   b. White: AC neutral.
   c. Green: Bonding ground.
   d. Red: AC control circuits.
   e. Yellow: Wiring with foreign voltage.

N. All wiring to and from field mounted devices shall be terminated at terminal strips, not directly connected to devices. Use plastic wireway Panduit or equal to route wire within the panel. Wireway shall be run in continuous length with snap-on covers, with AC and DC power wiring in separate wireways.

O. Protect all devices against damage from electrical transients induced in interconnecting lines by lightning discharges and nearby electrical equipment. Surge suppressors shall be provided at least at any interconnection of AC power and electronic equipment and at every analog signal input with circuits extending outside the building.

2.08 PANEL MOUNTED AIR CONDITIONING UNIT (VFD APPICATIONS ONLY)

A. The enclosure shall be Stainless Steel NEMA 4X rating fully gasketed for tight, leakproof installation. It shall be UL/CUL listed with closed loop cooling to allow the interior airflow system to be isolated from the ambient airflow system. The system shall be designed so no ambient air can invade the cool, dehumidified sensitive compartment.

B. Condenser Coils shall be Epoxy-Coated. This coating shall withstand 1000 hours of salt spray per the ASTM B 117 test method.

C. An air cured coating shall be sprayed on interior copper lines and brazed joints on the condenser side to provide protection from corrosive environments. The coating shall withstand 1000 hours of salt spray per the ASTM B 117 test method.

D. The unit shall include thermostatic Low Temperature Control to prevent over-cooling and to provide energy-efficient operation. Refrigerant shall be R410A.

E. Filters shall consist of a multi-layer grid of sturdy corrugated aluminum, securely held in a one-piece aluminum frame. Filters are required wherever air is drawn into an electronics enclosure or related cooling equipment to keep internal parts as clean as possible.

F. A short cycle relay shall be installed to protect the compressor from possible damage due to harmful short cycling, (frequent starting) where temperature controls enable the compressor to restart frequently or after a power interruption.

G. The unit shall be as manufactured by Kooltronic or approved equal. The unit shall be sized appropriately.

PART 3. EXECUTION

3.01 EXAMINATION & INSTALLATION

A. Verify items provided by other sections of Work are properly sized and located.

B. Verify that built-in items are in proper location, and ready for roughing into Work.

C. The Contractor shall provide limit switch to turn light "ON" when dry well hatch is opened.

D. Minimum interrupting capacity of the electrical panel shall be 10,000 AMPS.

E. Sump pump shall be provided with high level alarm wired to the telemetry.

F. A sump pump, discharge piping and local switch shall be installed in the valve pit in.

END OF SECTION

SECTION UC-250

GRAVITY SEWER SYSTEMS

PART 1 - GENERAL

1.01 SCOPE

A. These Specifications shall govern the design, materials and installation requirements of the Department for gravity sanitary sewer systems constructed in its service area when using Poly (Vinyl Chloride)(PVC) pipe and fittings, Vitrified Clay (V.C.) pipe and fittings or Ductile Iron pipe and fittings. "PVC" shall mean Poly (Vinyl Chloride) as it relates to pipe and fittings.

B. This Specification does not purport to cover all material or installation procedures which may be required, whether by the nature of the proposed work, or by the Department, or by other regulatory agencies.

C. It is intent of the Department to obtain a complete and working installation under this project, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.02 QUALITY ASSURANCE

A. All material and installation shall be in accordance with the Department's Design and Construction Standard Specifications and Details.

B. The material and installation for this project shall be in full compliance with all applicable standards listed in Section 01090, " Reference Standards"

1.03 DEFINITIONS

See Section 01005, "Defined Terms"

1.04 PROJECT APPROVAL

The approval of the Department shall be secured, in accordance with Section 17005, prior to any construction related activity.

1.05 SPECIAL CONDITIONS

The work shall proceed in accordance with the following specification sections, bound herein:

A. Section 01011 - Site Conditions
B. Section 01016 - Safety Requirements and Protection of Property
C. Section 01031 - Grades, Lines and Levels
D. Section 01100 - Special Project Procedures
E. Section 01750 - Maintenance of Traffic and Public Streets

1.06 DESIGN REQUIREMENTS

A. GENERAL

1. Gravity sanitary sewer systems shall be designed in accordance with the State of Florida Department of Environmental Protection (DEP) Rules, Chapter 62-604 for Wastewater Facilities, with OSHA requirements and with the "Florida State Board Health Sewage Guide" and the recommendations of Chapter 12 of the ASCE Manual No. 37, "Sewer Design and Construction", except as otherwise provided herein. Wet wells and manholes shall be classified as hazardous areas, Class 1, Division 2, Group C.

2. In addition, systems shall be designed in accordance with the requirements of the Miami-Dade County Department of Environmental Resource Management (DERM), the requirements of the latest edition of the South Florida Building Code and the Miami-Dade Water and Sewer Department Standards and Specifications.

3. The use of PVC pipe or AWWA C900 PVC pipe within a public water supply wellfield cone of influence or in areas zoned industrial or commercial shall be as stated under "Tightness Standards" in Section UC-370.

4. Manhole to manhole runs shall be kept in the range of no more than 400 feet without permission.

5. Slope shall be such as to maintain two feet per second minimum velocity when running full or half full when calculated using the Manning Equation with a roughness coefficient of .013.

6. Minimum slope for terminal runs shall be 0.40 percent for eight inch pipe. This slope shall be maintained for a minimum of 300 feet and longer if loading is abnormally light.

7. Design shall be performed by experienced personnel who have previously designed sewerage collection systems in Miami-Dade County. Proof of experience shall be provided if required by the Department. All design work submitted for approval shall be signed, sealed and dated by a registered professional engineer licenced to practice in the State of Florida.

8. The Department reserves the right request complete design calculations, which shall be submitted and shall be in a format easily read.

9. Design shall be conservative with sufficient peaking and infiltration factors included. Absolute minimum slopes shall not be used since minor field construction variations will reduce slopes and give actual velocity of less than two feet per second.

10. The Department reserves the absolute right to require greater slopes, higher peaking or infiltration factors if this is considered necessary upon review of design. The design/build firm shall conform with any such requirements and supply said design and construct same at no extra cost to the County.

11. The use of PVC pipe and fittings will only be permitted for gravity sanitary sewers (and service laterals) 15-inches in diameter and smaller.

1.07 PERMITS, INSPECTIONS AND FEES

A. The Contractor shall obtain and pay for all permits, official inspections and all other fees in accordance with Section 01740, "Permits".

B. Inspection by Department personnel is required in addition to, not in lieu of, municipal and County department inspections (if any).

C. No installation will be accepted until it has passed all inspections, including pavement installation or replacement.

1.08 PRECONSTRUCTION CONFERENCE

Prior to commencement of the work, the Contractor shall attend a "Preconstruction Conference" in accordance with Section 01150, "Preconstruction Conference".

1.09 SUBMITTALS

A. The Contractor shall furnish "As-Builts" in accordance with Section 01725. Project Record Documents shall be submitted in accordance with Section 01720. The Contractor shall submit operating and maintenance instructions and all other submittals in accordance with Section 01730.

B. Where the Specifications require test certification or certification that certain products or material furnished are as specified, the Contractor shall deliver such certification to the Department. No material or equipment shall be approved for use in the work until individual certification has been received.

1.10 SAFETY REQUIREMENTS

A. The Contractor shall be in compliance with all applicable provisions of the Occupational Safety and Health Act of 1970, in general, and any subsequent amendments and revisions thereto and specifically to the provisions concerning confined space entry.

B. The Contractor's personnel will be in the vicinity of raw sewage. For his own protection, as well as for his employees, he shall check with Metropolitan Dade County Health Department, and based upon their recommendation, shall have his personnel properly immunized against disease.

C. Under this project, personnel may be required to enter the existing manholes/sewers to perform certain items of work. Before entering, the Contractor shall be in compliance with Dade County Manhole Ordinance No. 83-3 (which mandates, in part, that above-ground safety personnel shall be on duty at all times when someone enters or works in a manhole/sewer and the air within a manhole / sewer shall be tested with a combination oxygen deficiency meter-explosion meter to determine oxygen content and explosion potential). A test for the presence of hydrogen sulfide shall also be performed. The work area must be ventilated mechanically by the use of an air blower, before entry and during occupancy, to insure that an adequate quantity of oxygen is supplied to the work area.

D. The Contractor shall conduct his operations in such a manner, utilizing warning devices such as traffic cones, barricades and warning lights, and personnel such as flagmen and uniformed police officers, that the public is given adequate warning of hazards of the work site as may be deemed necessary by the authority having jurisdiction and/or the Department. See Section 01750, "Maintenance of Traffic and Public Streets."

E. In the instance of men working within the manholes, the Contractor shall provide safety provisions to cover any possible consequences of structural failure and/or flooding. Such provisions might take the form of, but not be limited to, ladders in position to permit rapid egress; safety harnesses ; stand-by pumping equipment; extra air supplies; and such other measures as the situation and good construction practices might indicate.

F. Certain products specified in these Specifications contain warnings by the manufacturers that under certain conditions, if instructions for use of the product are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.

PART 2 - PRODUCTS

2.01 GENERAL

A. All material for use in the Project shall be new and of recent domestic manufacture and shall be the products of reliable manufacturers or suppliers who, unless otherwise specified, have been regularly engaged in the manufacture of such materials and equipment for at least five (5) years.

B. All fittings and components shall, wherever possible, be standard stock articles of well known manufacturers.

C. Where the Specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use, but, unless otherwise provided, articles or products of similar characteristics may be offered for the approval of the Department, upon approval by the Engineer of Record.

D. Copies of complete descriptive data shall be furnished regarding all material, consisting of dimension drawings, catalog references and other information necessary to clearly identify each article.

E. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent or connected structures and equipment, at his expense

F. Unless otherwise specified, all steel bolts, nuts, washers and all other miscellaneous ferrous metal items (except cast iron) furnished by the Contractor shall be hot-dip galvanized in accordance with ASTM A386, "Zinc Coating (Hot-Dip) on Assembled Steel Products" and ASTM A385, Providing High-Quality Zinc Coatings (Hot-Dip)". Where the word "galvanized" or its abbreviation is used on the Plans or in the Specifications, it shall mean hot-dip galvanized. Fabricated items shall be hot-dip galvanized after fabrication. Internal threads shall be tapped or re-tapped after galvanizing.

G. Where miscellaneous materials are required for a complete installation the Contractor shall provide such materials in conformance with Section 15065, "Miscellaneous Material".

H. See Section 01100 for water used in construction.

2.02 CASTINGS

A. GENERAL

1. Material used in the manufacture of the castings shall conform to ASTM A48, "Gray Iron Castings", for Class 30 iron. Manhole and valve box covers shall have a roadway or pedestrian type surface as required by location, and shall be non-rocking.

2. Castings shall be in compliance with Section 05550. Castings shall be as manufactured by U.S.F. Fabrication, Inc., Neenah Foundry, or approved equal.

3. Castings shall be delivered unpainted with a shotblasted finish.

B. MANHOLE FRAMES AND COVERS

Manhole covers and frames shall be Department Type "A" U.S.F.&F No. 310 as manufactured by U.S.F. Fabricating, Inc., Hialeah, Florida, or approved equal. The covers shall be cast labeled "SANITARY SEWER".

2.03 BRICK

A. Clay Brick: Bricks for manhole construction shall be dense, hard burned, common clay brick conforming to ASTM Standard C62, "Building Brick (Solid Masonry Units made from Clay or Shale)".

B. Concrete Brick: Concrete bricks shall conform to ASTM Standard C55, "Concrete Building Brick".

C. All bricks shall have true edges and sharp corners and shall have been cured for at least 14 days before being placed.

2.04 CONCRETE, MORTAR AND GROUT

See Section 17033, " Concrete, Mortar and Grout (Short)"

2.05 EMBEDMENT MATERIAL

Embedment material, for bedding, haunching and initial backfill, shall conform with the requirements of Section UC-300 “Gravity Sewer Pipe Foundation”.

2.06 MANHOLE

A. Shallow manholes shall be constructed of brick or precast concrete. All other manholes shall be constructed of precast concrete. See Section 02536, "Precast Manholes & Covers"

B. Castings for manhole frames, covers and other items shall conform to Subsection 2.02, above. Casting patterns shall conform to those designated in the Miami-Dade Water and Sewer Standard Details.

C. Concrete shall conform to Section 17033.

D. Brick for manhole construction shall be clay brick, in accordance with Subsection 2.03, above.

E. Cement mortar for manhole construction shall conform to Section 17033. It shall be mixed dry and then wetted to proper consistency for use. No mortars that have stood for more than one hour shall be used. Brick manholes shall be coated with 3/4-inch thickness of mortar both inside and outside.

F. The invert channels shall be formed of brick or brick rubble thoroughly bedded and covered with sand-cement grout, accurately shaped to a semicircular bottom conforming to the inside of the adjacent sewer section. Steep slopes outside the invert channels shall be avoided. Changes in size and grade shall be made gradually and evenly. Changes in the direction of the sewer or entering branch shall be a smooth curve with radius as long as practical.

G. Frames and covers shall be set accurately to grade with a minimum of 3 and a maximum of 5 courses of brick provided as a leveling course. It shall be the Contractor's responsibility to assure that the frames and covers are set to match existing and/or proposed finish paving grades at the manhole locations.

H. For PVC Sewers:

1. The first joint at both influent and effluent sewers at each manhole, including service laterals, shall consist of an approved manhole coupling grouted into the manhole wall, and providing a continuous watertight elastomeric gasket seal between the coupling and the pipe inserted therein. The coupling shall have an increasing tapered interior from the gasket groove to allow flexibility for the pipe in the event of future settlement of the manhole or pipeline.

2. The first length of PVC pipe into or out of the manhole shall be 2-feet long, maximum, and shall be either plain-end by plain-end, or plain-end by bell. In the first option, the next joint shall be a double bell PVC repair coupling (no stop) with a maximum 1-inch gap between the pipes inserted therein. In the latter option, the next joint shall be another 2-foot long section, maximum, of plain-end by bell PVC pipe.

I. For Ductile Iron and Vitrified Clay Sewers

The first length of pipe into or out of the manhole shall be a 2-foot length of plain end by plain end ductile iron pipe (i.e. 2' as measured from the outside wall) grouted directly into the opening in the manhole wall. This P.E. X P.E. short shall be joined to the spigot end of an adjacent ductile iron sewer main by use of a ductile iron solid sleeve. In the instance of a vitrified clay main, the ductile iron P.E. X P.E. short manhole stub out shall be joined to the V.C. spigot by use of a double hub connector for vitrified clay pipe. Note that C-900 PVC repair couplings shall not be used in ductile iron or vitrified clay mains.

J. Where shown on the drawings, the Contractor shall provide stub-outs for future extensions. Both ends of all such stubouts shall be closed with specified PVC plugs.

K. Precast manholes shall conform to Section 02536, "Precast Manholes & Covers". In precast concrete manholes, holes for sewer line connections, with a diameter equal to the outside diameter of the connecting sewer plus an additional four inches (4"), shall be formed in the manhole walls. No cutting or chipping at pre-formed holes, or cutting additional holes in precast concrete walls will be allowed.

L. A minimum of three to a maximum of five courses of brick shall be constructed atop each manhole corbel.

M. Prior to acceptance of manhole, the Contractor shall verify that he has installed required manhole accessories and coating/lining (See Section 02536)

2.07 POLY (VINYL CHLORIDE) PIPE

Pipe for use in gravity sewer systems shall be Vitrified Clay, Ductile Iron with polyethylene or ceramic epoxy (Protecto 401) lined , PVC SDR 35, or AWWA C900, C905 PVC as shown on the plans or called out elsewhere herein. For further information on these types of pipe, see Section 15060, “Piping and Fittings”.

2.08 REINFORCING STEEL

A. Bar reinforcement for concrete structures shall conform to the requirements of ASTM Standard A615 "Deformed and Plain Billet-Steel Bars for Concrete Reinforcement", Grade 60, Deformed, except that steel manufactured by the Bessemer Process will not be accepted. Wire mesh reinforcing for concrete paving or driveway repairs, if required, shall be welded wire fabric meeting the requirements of ASTM Standard A185, "Steel Welded Wire, Fabric, Plain, for Concrete Reinforcement".

B. The Contractor shall furnish the Department with manufacturer's test certificates showing the steel to meet the above requirements, in addition to which the Department may take representative samples from the material on the job and have them tested by an independent testing laboratory. Completely detailed shop drawings and bending schedules shall be submitted by the Contractor for the approval of the Engineer of Record. Such approval shall be obtained before the bars are cut and bent.

2.09 DUCTILE IRON CASING PIPE

Ductile iron casing pipe shall be ANSI/AWWA Standard C151/A21.51, Class 50, no lining required. Casing pipe shall be one size larger than PVC pipe to be encased, unless otherwise approved.

2.10 DUCTILE IRON SEWER PIPE

A. Ductile iron sewer pipe shall be ANSI/AWWA Standard C151/A21.51, Class 53 for 6-inch, Class

52 for 8-inch, Class 50 for 10-inch through 15-inch. Ductile iron pipe shall conform to Section 15060.

B. All ductile iron pipe and fittings 8-inches and larger in diameter for use in force mains and gravity sewers, except riser pipes, shall be delivered with either heat fused virgin polyethylene lining or ceramic epoxy lining (See Section 15060). The only ceramic epoxy material approved by the Department at this time is a high-build multi-component Amine cured Novalac epoxy, Protecto 401, by Vulcan Painters, Inc. of Bessemer, AL 35021.

2.11 MISCELLANEOUS MATERIAL

A. The Contractor shall furnish and install all miscellaneous material and appurtenances required for a complete installation. Section 15065 specifies material necessary for a complete installation, not specified herein. These material, including the following, shall be installed when required, whether shown on the Plans or not.

1. Paint, Bituminous
2. Caulking Compound
3. Manhole Couplings
4. PVC double bell repair couplings, No-stop (sleeves)
5. PVC double bell transition couplings or adapters PSM SDR-35 PVC Sewer Pipe to ductile-iron or AWWA C900 CI-PVC Pressure pipe.
6. Stainless steel repair clamps, with stainless steel bolts

PART 3 - EXECUTION

3.01 PIPE INSTALLATION, GENERAL

A. Proper and suitable tools and appliances for the safe convenient handling and laying of pipe shall be used and, in general, conform with manufacturer's recommendations. At the time of laying, the pipe shall be examined carefully for defects, and should any pipe be discovered to be defective after being laid, it shall be removed and replaced with sound pipe by the Contractor at his expense.

B. Pipe and fittings shall, at all times, be handled with great care to avoid damage. In loading and unloading, they shall be lifted with cranes or hoists or slid or rolled on skidways in such manner as to avoid shock. Under no circumstances shall this material be dropped or allowed to roll or slide against obstructions. Pipe an other material shall be distributed along the right-of-way in advance of installation only to the extent approved by the Department. Such materials shall be so placed as to keep obstruction to traffic minimum.

C. Upon satisfactory completion of the pipe bedding, a continuous trough for the pipe barrel and recesses for the pipe bells, or couplings, shall be excavated by hand digging. When the pipe is laid in the prepared trench, true to line and grade, the pipe barrel shall receive continuous, uniform support with no pressure being exerted on the pipe joints from the trench bottom.

D. Pipe shall be installed in accordance with the manufacturer's recommendation. Before being lowered into the trench, the pipes and accessories shall be carefully examined and the interior of

the pipes shall be thoroughly cleaned of all foreign matter and other deleterious materials by methods acceptable to the Department. During suspension of work, for any reason, at any time, a suitable stopper shall be placed in the end of the pipe last laid to prevent mud, dirt, groundwater or other foreign material from entering the pipe. Any pipe which is disturbed or found defective shall be immediately removed and replaced with sound pipe.

E. Gaskets shall be thoroughly checked for breaks, cuts or other damage, and shall be free of oil, grease, dirt or other foreign matter. Pipe joints shall be assembled with care. Lubricant, if required shall be as recommended by the manufacturer of the pipe, and shall have no deteriorating effects on the gasket and pipe materials. If assembly is under water, lubricant recommended by the manufacturer for underwater use is required.

F. Good alignment of the pipe is required for assembly. Align the spigot to the bell of the previously laid pipe and insert the spigot into the bell until it uniformly contacts the gasket. Apply steady pressure until the spigot easily slips through the gasket. Do not push or swing the spigot into the bell. Smaller diameter pipe and fitting may be assembled manually. Mechanical means such as bars and blocks, ratchets or jacks shall be used for joining larger pipe and fittings. Power equipment such as a backhoe bucket, shall not be used to assemble pipe and fittings, since excessive force may damage the gasket or bell.

G. Cutting the pipe in the field shall be done by the Contractor in a neat and workmanlike manner using manual or power saws. The pipe shall be marked around its entire circumference before cutting to assure a square cut. After cutting, the end shall be beveled with a beveling tool, rasp, or other approved equipment, to the proper taper. Mark the proper insertion depth on the cut and beveled end before installing the cut pipe into the pipeline. Pipe laying shall proceed up-grade from the lowest point of the proposed system, with spigot ends pointing in the direction of flow.

H. All pipe shall be laid straight, true to the lines and grades shown on the Plans, or matching existing grade, in each section between manholes. The pipe shall be laid so that the identification markings are located on the top of the installed pipelines.

I. Each individual length of pipe shall be solidly and evenly bedded and haunched throughout its length on a prepared bed on the floor of the trench and not supported in position on blocks or wedges. Pipe shall only be laid when the two preceding lengths have been thoroughly embedded in place to prevent any movement or disturbance of the finished joint. Any pipe which is disturbed or found to be defective after laying shall be taken up and relaid or replaced.

J. Any work within the pipe and fittings shall be performed with care to prevent damage to the interior wall of the pipe. Damaged interior walls shall be repaired or the pipe section or fitting replaced as required by the Department. No cables, lifting arms, hooks or other devices shall be inserted into the pipe or fitting. All lifting, pulling or pushing mechanisms shall be applied to the exterior of the pipe or fitting.

K. After pipe has been laid, reviewed and found satisfactory, sufficient backfill shall be placed along the pipe barrel to hold the pipe securely in place during the conduction of the required tests.

3.02 INSTALLATION OF DUCTILE IRON AND VITRIFIED CLAY PIPE

A. Installation of gravity sewers shall conform to the applicable requirements of ANSI/AWWA Standard C600-93, "Installation of Ductile Iron Water Mains and Appurtenances".

B. Cutting of ductile iron pipe for fittings and other connections shall be done by the Contractor in a neat and workmanlike manner without damage to the pipe, the lining, or the coating. Pipe shall be cut with a mechanical pipe saw. After cutting the pipe, the plain ends shall be filed to remove all sharp edges and burrs.

C. Polyethylene encasement of valves, cast iron pipe and fittings, if required by the Department, shall be installed in accordance with ANSI/AWWA C105/A21.5, "Polyethylene Encasement for Ductile-Iron Piping for Water and Other Liquids" Method A, B or C.

D. If any difficulty is experienced in assembling lengths of pipe together in the trench, the pipe sections shall be tried on the surface of the ground and each length of pipe plainly marked for position and sequence in which they are to be installed.

E. Ductile iron solid sleeves shall be used to connect D.I. pipe spigots to existing D.I. manhole stub spigots. Vitrified clay double hub connectors shall be used to connect D.I. manhole stub outs to V.C. pipe spigots.

F. All bolts, nuts, gaskets or other joint materials for use in the pipeline shall be properly protected.

G. Gaskets shall be properly stored, and care shall be exercised to keep them away from heat, light, oil, gasoline or other petroleum products. Gaskets shall be kept clean at all times and not handled with greasy or dirty hands.

3.03 INSTALLATION OF POLY VINYL CHLORIDE (PVC) PIPE

A. Each length of pipe, immediately prior to being placed in position in the trench, shall be inspected, cleaned and prepared for installation. Gaskets shall be thoroughly checked for breaks, cuts or other damage, and shall be free of oil, grease, dirt or other foreign matter. Pipe joints shall be assembled with care. Lubricant, if required, shall be as recommended by the manufacturer of the pipe, and shall have no deteriorating effects on the gasket and pipe materials. If assembly is underwater, lubricant recommended by the manufacturer for underwater use is required. Good alignment of the pipe is required for assembly. Align the spigot to the bell of the previously laid pipe and insert the spigot into the bell until it uniformly contacts the gasket. Apply steady pressure until the spigot easily slips through the gasket. Do not push or swing the spigot into the bell. Small diameter pipe and fittings may be assembled manually. mechanical means such as bars and blocks, ratchets or jacks shall be used for joining larger pipe and fittings. Power equipment, such as backhoe bucket, shall be not be used to assemble pipe and fittings, since excessive force may damage the gasket or bell.

B. Cutting the pipe in the field shall be done by the Contractor in a neat and workmanlike manner using manual or power saws. The pipe shall be marked around its entire circumference before cutting to assure a square cut. After cutting, the end shall be beveling tool, rasp, or other approved equipment, to the proper taper. Mark the proper insertion depth on the cut and beveled end before installing the cut pipe into the pipeline. Pipe laying shall proceed up-grade from the lowest point of the proposed system, with spigot ends pointing in the direction of flow. All pipe shall be laid straight, true to the lines and matching existing grade, in each section between manholes. The pipe shall be laid so that the identification markings are located on the top of the installed pipelines. At all times when work is not in progress, the exposed ends of all pipes shall be fully protected by an approved stopper to prevent groundwater, dirt, rocks or other substances from entering the pipe.

3.04 PIPE-TO-PIPE CONNECTIONS

Pipe-to-pipe connections shall be made by using solid sleeves for Ductile Iron, double hub

connectors for vitrified clay and double bell couplings for PVC.

3.05 PIPE-TO-PIPE MANHOLE CONNECTIONS

When a sound pipe stub-out exists at a manhole to which connection is to be made, a pipe-to-pipe connection shall be made as described above. If a stub-out is not present or is faulty, an opening shall be cut in the manhole wall and the connection made. The connection shall be constructed as specified above in paragraphs 2.06 H and I with the pipe material/method chosen to match that of the new line. The invert/shelf area inside the manhole shall be cut and reshaped as necessary to construct the new channels in compliance with WASD Standard Details

3.06 GRAVITY SEWER SERVICE LATERALS

See Section UC-310, "Gravity Sewer Service Laterals".

3.07 MODIFICATIONS OF EXISTING MANHOLES

See Section UC-330, "Repairs to Department Sewers"

3.08 EXCAVATION

See Section 02315, "Trenching and Backfilling for Piping Systems"

3.09 SEWER PIPE FOUNDATION

See Section UC-300, "Gravity Sewer Pipe Foundation"

3.10 CLEANING AND TESTING

See Section UC-370, "Cleaning and Testing Gravity Sewers"

3.11 SEWERAGE REMOVAL

See Section UC-290, "Removal of Sanitary Sewerage and Debris"

3.12 SEWAGE FLOW CONTROL

See Section UC-320, "Sewerage Bypass Pumping and Flow Control"

3.13 REPAIR OF DAMAGE TO DEPARTMENT MAINS & SEALING LEAKS

See Section UC-330, "Repairs to Department Sewers"

3.14 DEFLECTION TEST

See Section UC-350, "Sewer Deflection Test"

END OF SECTION

SECTION UC-290

REMOVAL OF SANITARY SEWERAGE AND DEBRIS

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish all labor, material and equipment required for the removal of sanitary sewer mains and appurtenances.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 01100 - Special Project Procedures
Section 02315 - Trenching and Backfilling for Piping Systems

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 REMOVAL OF SANITARY SEWER

A. During cleaning operations and removal sewer mains, all sludge, dirt, sand, rock, grease, laitance (lime scum), roots, mortar, unsound concrete and other materials shall be completely removed. If the steel reinforcing is exposed, the Contractor shall request guidance from the Engineer of Record.

B. Under no circumstances shall sludge or other debris removed during cleaning or sewer main removal operations be dumped or spilled into the streets, ditches, storm drains or other sanitary sewers. However, water decanted from removed solids shall be returned to the sewer.

C. The Contractor is advised that he shall not dispose of this material by dumping on private or public property, by sale to others, or any means other than those given below. Any load of material, or any portion thereof, disposed of in a non-permitted fashion will result in a charge to the Contractor in the amount of $500.00 per load, or any portion thereof, which sum will be deducted by the Department from any monies due the Contractor. Additionally, the Contractor shall be backcharged for any fines, penalties, or other costs or damages imposed upon the City any agency or private party as a result of improper disposal by the Contractor.

D. The Contractor shall keep his haul route and work area(s) neat and clean and reasonably free of odor, and shall bear all responsibility for the cleanup of any spill which occurs during the transport of cleaning or surface preparation by-products and the cleanup of any such material which is authorized by or pursuant to this Contract and in accord with applicable law or regulations. The Contractor shall immediately cleanup any such spill or waste. If the Contractor fails to cleanup

such spill or waste immediately, the Department shall have the right to cleanup or arrange for its cleanup and shall charge to the Contractor all costs, including administrative cost and overhead, incurred by the Department in connection with such cleanup. The Department shall also charge to the Contractor any costs incurred or penalties imposed on the Department as a result of any spill, dump or discard. Under no circumstances is this spilled material to be discharged into the waterways or any place other than where authorized to do so by the appropriate authority. The term "Contractor" as used in this section shall include the Contractor's subcontractors and other Contractors.

D. The general requirements for vehicles hauling such waste materials are as follows: Transport vehicles must be of type(s) approved for this application by the political jurisdiction involved. General requirements are that the vehicles have watertight bodies, that they may be properly equipped and fitted with seals and covers to prohibit material spillage or drainage, and that they be cleaned as often as is necessary to prevent the deposit of material on the roadways. Vehicles must be loaded within legal weight limits and operated safely within all traffic and speed regulations.

E. The routes used by the Contractor for the conveyance of this material on a regular basis shall be subject to approval by the governing authority having jurisdiction over such routes.

F. All waste materials and debris removed during these operations shall be, if sufficiently dewatered (at least 20 percent solids and no visible moisture), conveyed directly to the County's Class I sanitary landfill, the South Dade Solid Waste Disposal Facility, 24000 S.W. 97th Avenue, Dade County, Florida. Solids which are too wet for direct deposit at the landfill shall be conveyed to and deposited on the Plant's "cleanout" pad established to receive and drain/dry this material. All cost for such removal and disposal, including tipping fees, shall be paid by the Contractor.

G. Material cleaned from the sewer shall be removed from the site for disposal as each truck is filled and at the end of each work shift.

H. Copies of records of all disposal shall be furnished to the Engineer of Record, indicating disposal site, date, amount, and a brief description of material disposed. Under no circumstances will the Contractor be allowed to accumulate debris, etc., on the site of work beyond the stated time, except in totally enclosed containers and as acceptable to the Department.

END OF SECTION

SECTION UC-300

GRAVITY SEWER PIPE FOUNDATION

PART 1 - GENERAL

1.01 WORK INCLUDED

The work under this Section includes the installation of gravity sewer pipe foundations.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 01100 - Special Project Procedures
Section 02315 - Trenching and Backfilling for Piping Systems

PART 2 - PRODUCTS

2.01 Material: See Part 2 of Section 02315

PART 3 - EXECUTION

3.01 GENERAL

A. Excavation shall proceed in accordance with Section 02315, "Trenching and Backfilling for Piping Systems".

B. Gravity sewers shall be constructed using Vitrified Clay, Poly Vinyl Chloride (PVC) (SDR 35 or AWWA C900) pipe and fittings or ductile iron pipe and fittings, as shown on the approved Plans (See Section 15060, "Piping and Fittings" for D.I.P. or Section UC-250, “Gravity Sewer Systems” for PVC).

3.02 FOUNDATIONS FOR V.C. AND D.I.P. AT DEPTH OVER 10 FT. OR BELOW WATER

A. Sewer pipe constructed at a depth greater than 10 feet, or with a trench bottom below groundwater, shall have a rockbed foundation, in accordance with Section 02315. The trench shall be excavated to a depth of at least 6 inches below the bottom of the pipe, the trench backfilled with a layer of rockbed firmly compacted, the pipe solidly bedded and additional rockbed firmly packed and thoroughly compacted under and around the pipe up to the springline.

B. See Subsection 3.03, below, for sewer pipe constructed at a depth less than 10 feet and trench bottom above groundwater.

3.03 FOUNDATIONS FOR V.C. AND D.I.P. AT DEPTH ABOVE 10 FT. AND ABOVE WATER

Pipe constructed at cut ranges less than 10 feet, and the trench bottom is above ground water, shall be installed according to the following conditions:

A. Installation in Rock Bottom

Where rock is encountered at the bottom of a trench in which pipe is to be installed, the excavation shall be extended to a depth at least 6 inches below the bottom of the pipe and shall be backfilled with selected backfill material in 6-inch layers, with each layer being firmly compacted, and with the final layer carefully graded and compacted at the proper elevation to provide continuous support for the pipe barrels. Where pipe bells will be located, depressions shall be excavated in the trench bottom to provide clearance under the bell or socket.

B. Installation in Soil Bottom

Where rock is not encountered at the bottom of a trench excavation, and the soil is satisfactory for pipe foundation, in the opinion of the Engineer, excavation shall be halted at an elevation slightly above that for bedding the pipe, and the pipe bed carefully excavated by hand in the undisturbed trench bottom to provide continuous bearing for the pipe barrels and clearance under the bells or sockets, or machine excavation may extend slightly below the elevation for bedding the pipe with the trench bottom carefully backfilled and compacted as specified.

3.04 FOUNDATIONS FOR PVC GRAVITY SEWERS

Embedment material (for bedding, haunching and initial backfill) shall be Class I in stable soil conditions, and Class II in unstable soil conditions, as modified herein.

A. Class I materials shall be angular, 1/4 to 3/4 inch graded stone including washed and graded limerock.

B. Class II materials shall be well graded coarse sands and gravels with the following gradation requirements:

Sieve Size	Percent Passing By Weight
3/4	100
3/8	85-100
#8	40-60
#30	5-30
#100	0-2

END OF SECTION

SECTION UC-310

GRAVITY SEWER SERVICE LATERALS

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish all labor, material, equipment and appurtenances necessary for the installation of gravity sewer service laterals, complete, in accordance with these specifications.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 02315 - Trenching and Backfilling for Piping Systems
Section UC-250 - Gravity Sewer Systems

1.03 QUALITY ASSURANCE

A. Lateral sewers shall be installed in accordance with all the applicable requirements for pipe installation. Branch fittings shall be installed in the main line sewer as it is constructed, in the locations and configuration of the original laterals or as designated by the Engineer.

B. All excavations shall be executed in accordance with the South Florida Building Codes, OSHA requirements, the State of Florida Trench Safety Act (TSA), the State of Florida Trench Safety Act (TSA) and all applicable requirements of Section 01016, including notification of the Sunshine State One-Call Center (1-800-432-4770), 48 hours prior to any excavation.

PART 2 - PRODUCTS

See Part 2 of Section UC-250, "Gravity Sewer Systems" & "Tightness Standards" under Section UC-370.

PART 3 - EXECUTION

3.01 INSTALLATION OF LATERALS

A. Service laterals shall be installed in accordance with the requirements for gravity main installation. Branch fittings shall be installed in the main line sewer as it is constructed. The branch fittings shall be either a tee set for a modified riser when the top of the sewer is 7 feet or deeper, or a wye set and connected as shown in the Miami-Dade Water and Sewer Department's Standard Details SS 1.0 and 2.0, respectively. In no case shall the branch be covered until its location has been measured and recorded.

B. Where a service lateral enters a manhole at an elevation of 2 feet or more above the

sewer main invert, a drop connection shall be required.

C. Each service lateral shall be plugged at the point shown on the Standard Details. Plug shall provide a watertight seal, without the use of adhesives or epoxies, and shall be subject to approval by the Department. In no case shall a service lateral be covered until its exact location is measured and recorded, nor until a two-inch square by two feet long, pressure-treated pine stake, with the top stained or painted green, has been set by the Contractor at the end of the service lateral.

D. The Contractor shall not excavate trenches for service laterals to both sides of the street at the same time unless written permission has been secured in advance to close the street.

3.02 REMOVAL AND REPLACEMENT OF LATERALS

A. Excavate in accordance with Section 02315, "Trenching and Backfilling for Piping Systems"

B. The existing laterals shall be hand excavated to a joint, disassembled, or if necessary saw cut, clean and square and the appropriate adapter installed to connect the replacement lateral. Care shall be taken to maintain the slopes of the existing lateral. The lateral shall be removed and replaced from the main line to a point along the existing lateral determined by the Engineer of Record to be in acceptable condition.

C. Placement of bedding/cover materials in the trench shall be the same for laterals as provided in Section UC-300, "Gravity Sewers Pipe Foundation".

END OF SECTION

SECTION UC-320

SEWERAGE BYPASS PUMPING AND FLOW CONTROL

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish and install all labor, material and equipment necessary to control the flow of sewage in accordance with this Section. This Section also contains provisions regarding surcharging sewers and sewage spills.

1.02 SUBMITTAL

The Contractor shall submit complete, detailed plans for this aspect of the work to the City for approval.

1.03 SPECIAL PROVISIONS

A. All applicable requirements in the following specification sections shall apply during execution of the work:

Section 01100 - Special Project Procedures
Section 01750 - Maintenance of Traffic and Public Streets

B. For projects where twenty-four (24) hour by-pass pumping of sewage is required, the Contractor shall provide personnel for manning and maintenance.

C. The Contractor shall be completely responsible for conditions at the job site, until acceptance of the project; he shall provide for traffic safety, traffic control and protection of property; and he shall be directly responsible to property owner(s) for any damage, injury, expense, loss, suits, or claims in accordance with Section 01016, "Safety Requirements and Protection of Property".

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 BYPASS PUMPING/FLOW CONTROL, GENERAL

A. The Contractor shall be prepared to bypass pump the sewage effluent as a part of his operations, if necessary. The Contractor shall provide all necessary pumps, piping, and other equipment to accomplish this task with each mobilized crew and shall be prepared to perform all construction; obtain all permits; pay all costs; and perform complete restoration of all existing facilities to equal or better condition and to the satisfaction of the City. Bypass

pumping will occur where high flow rates and insufficient upstream storage capacity make this necessary. All costs of accomplishing the bypass pumping tasks, at whatever volume, and all associated work, such as, for example, construction of intake and discharge points, and restoration, shall be considered as incidental to the work.

B. When sewer line flows at the upstream manhole of the gravity main being replaced or the pump station wet well are above the maximum allowable requirements for the replacement, the flows shall be reduced to the levels indicated by one of the following methods: manual operation of pumping stations by the City forces, by the Contractor plugging/blocking of the flows, or by the Contractor pumping/bypassing of the flows all as acceptable to the City.

C. In some applications, the sewer may be plugged and wastewater contained within the capacity of the collection system. This shall only be done when it has been determined that the system can accommodate the surcharging without any adverse impact.

D. When sewer line flows at the upstream manhole of the line being removed and replaced, in the opinion of the Engineer of Record, are too excessive to plug while the work is being performed; the Contractor shall submit for approval by the City, a written plan and pump/ bypass the flow.

E. For all service lateral reestablishment, testing and sealing, the depth of flow within the sewer shall not exceed that shown below for the respective pipe sizes as measured in the manhole.

	Maximum Depth of Flow
4-inch - 12-inch Pipe	25 percent of pipe diameter
15-inch - 18-inch Pipe	30 percent of pipe diameter

3.02 PLUGGING AND BLOCKING

A sewer line plug shall be inserted into the line at a manhole upstream from the section being removed and replaced or pump station wet well being re-worked. The plug shall be so designed that all or any portion of the operation flows can be released. During removals and replacement, the flows shall be shut off and monitored or pumped / bypassed, as acceptable to the City. After the work tasks have been completed, flows shall be restored to normal.

3.03 PUMPING AND BYPASSING

A. When pumping / bypassing is required, as approved by the City the Contractor shall supply the necessary pumps, conduits and other equipment to divert the flow of sewage around the sewer section or pump station in which work is to be performed. The bypass system shall be of sufficient capacity to handle existing flows plus additional flow that may occur during periods of rain storms. The Contractor shall be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing system. A "setup" consists of the necessary pumps (including backup pumps if required), conduits and other equipment to divert the flow of sewage around the pump station or sewer section, from the start to finish of work performed in the pump station or sewer section.

B. Pumps and equipment shall be continuously monitored by a maintenance person capable of starting, stopping, refueling and maintaining these pumps during the construction. If pumping

is required on a 24-hour basis, engines shall be equipped in a manner to keep noise to a minimum. In the instance of work on a pump station, the Contractor may be required to provide, at his sole expense, a temporary electric service, electrically driven pump(s) and engine driven backup pump(s).

3.04 SURCHARGING SEWERS

A. Where the raw sewage flow is blocked or plugged, sufficient precautions must be taken to protect the public health. Upstream flow shall be monitored. The sewer lines shall also be protected from damage. The following occurrences will not be allowed:

1. No sewage shall be allowed to back up into any homes or buildings.

2. No sewage shall overflow any manholes, cleanouts or any other access to the sewers.

3. Users upstream of the repair area shall be able to use all their water and sewer utilities without interruption.

B. If any of the above occur or are expected to occur, the Contractor shall bypass pump to alleviate one or all of the conditions. Additionally, the Contractor is required to observe the conditions upstream of the plug and be prepared to immediately start bypass pumping, if needed.

3.05 PUMP DISCHARGE

Any sump pumps, bypass pumps, trash pumps or any other type pump which pulls sewage/water or any type of material out of the manhole or sewer shall discharge this material into another manhole, or appropriate vehicle or container acceptable to the Engineer of Record. Under no circumstances shall this material be discharged, stored or deposited on the ground, swale, road or open environment.

3.06 MAINTENANCE OF TRAFFIC FOR BYPASS PUMPING

The Contractor shall take appropriate steps to ensure that all pumps, piping and hoses that carry raw sewage are protected from vehicular traffic and pedestrian traffic. Maintenance of traffic shall be performed in accordance with Section 01750, "Maintenance of Traffic and Public Streets"

3.07 SEWAGE SPILLS

A. In the event, during any form of "Sewage Flow Control," that raw sewage is spilled, discharged, leaked or otherwise deposited in the open environment, due to the Contractor's work, the Contractor is responsible for any cleanup of solids and disinfection of the area affected and liability for any claims. This work shall be performed at the Contractor's expense with no cost to the City.

B. The Contractor is also responsible for notifying the sewer system maintenance personnel and complying with any and all regulatory requirements in regard to the size of spill with no cost to the City.

C. The Contractor shall be backcharged for any fines, penalties or other costs or damages imposed upon the City by any agency or private party as a result of a spill or improper discharge by the Contractor.

END OF SECTION

SECTION UC-330

REPAIRS TO DEPARTMENT SEWERS

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish all labor, material and equipment required to repair the Department's sewers due to damage caused by his operations or as required to perform necessary modifications to existing installations.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 01100 - Special Project Procedures
Section 02315 - Trenching and Backfilling for Piping Systems
Section UC-250 - Gravity Sewer Systems

PART 2 - PRODUCTS

2.01 CHEMICAL JOINT AND CRACK SEALING MATERIALS FOR ACTIVE LEAKS

A. Chemical joint and crack sealing materials used on this Project shall have the following properties: react quickly to form a permanent watertight seal; resultant seal shall be flexible and immune to the effects of wet/dry cycles; non-biodegradable and immune to the effects of acids, alkalis, and organics in sewage; component packaging and mixing compatible with field conditions and worker safety; extraneous sealant left inside pipe shall be readily removable.

B. Chemical joint sealing material shall be acrylic resin type and shall be furnished with activators, initiators, inhibitors and any other materials recommended by the manufacturer for a complete grout system. Sealing grout shall be furnished in liquid form in standard manufacturer's containers. Sealing grout shall be AV-118 Duriflex manufactured by Avanti International, Houston, Texas (1-800-877-2570) or approved equal.

PART 3 - EXECUTION

3.01 REPAIRS DUE TO CONTRACTOR'S OPERATIONS

A. The Contractor shall exercise caution to insure that his operations do not damage the existing sewer. The Contractor shall be responsible for repairs to the sewers which are necessary due to damage caused by the Contractor's operations. Such repair shall be considered as part of the work.

B. Damaged pipe or manholes shall be replaced in kind or repaired by the Contractor to the satisfaction of the Department, with emphasis on providing a good, solid foundation for the new pipe. Temporary paving and permanent paving repairs shall also be made by the Contractor.

C. Contractor shall immediately repair any damage using methods satisfactory to the Engineer. Repairs shall proceed on a 24-hour/day, seven day/week basis if so directed by the Department. If the Contractor fails to immediately repair any such damage, the Department shall have the right to make the repair or have the repair made, and may charge to the Contractor all costs, including administrative costs and overhead, incurred by the Department in connection with the repair. The Department shall also charge to the Contractor any costs incurred or penalties imposed on the Department as a result of such damage.

D. The Contractor is strongly advised not to position equipment having greater than an AASHTO H-20 loading above the sewer line. Repair of any damage caused by such equipment loads shall be at the Contractor's expense.

E. Any repairs requiring excavation, except emergency work, shall have prior approval of the Engineer.

3.02 MODIFICATION OF EXISTING MANHOLES

Where modification of existing manholes are required to replace existing mains the following requirement shall be adhere to:

A. After satisfactory replacement and testing of mains all interior concrete surfaces of the modified manhole shall be high pressure washed and seal coated with 2 coats of a coal tar epoxy, Kop-Coat Company Bitumastic 300-M, or approved equal. Each coat shall have a dry film thickness of 8 mils, minimum. The requirements of this paragraph are not applicable to existing manholes to lined with a Department approved liner. (See Section 02536 for additional requirements.)

B. The modifications to the invert channels of the manhole shall be formed of brick or brick rubble thoroughly bedded and covered with sand-cement grout, accurately shaped to a semi-circular bottom conforming to the inside of the adjacent sewer section. Steep slopes outside the invert channel shall be in the direction of the sewer or entering branch shall be a smooth curve with radius as long as practical

C. Gravity sewer shall connect to the manholes in accordance with Miami Dade Water and Sewer Department's Standard Details and Section UC-250.

3.03 SEALING OF POST-REPLACEMENT LEAKS

In the event it becomes necessary to seal sewer pipe to stop leakage after sectional replacement, the following procedure shall be used:

A. Chemical joint or crack sealing material specified above or as approved by the Department shall be furnished and satisfactorily installed. The Contractor shall modify his equipment as necessary to seal the leaks, however both his equipment and sealing method shall meet the approval of the Department prior to use.

B. Extreme caution shall be utilized during leak sealing (pressure) operations in order to avoid damage of the sewer pipe. If any damage occurs, it shall be repaired as specified in Subsection 3.01, above, and to the satisfaction of the Department. Excessive pumping of grout which might plug a service lateral shall be avoided. Any service laterals blocked by the

grouting operation shall be cleared immediately by the Contractor.

END OF SECTION

SECTION UC-350

SEWER DEFLECTION TEST

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall test new sewer system installations, completely and satisfactorily, prior to final acceptance by the Department.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 GENERAL

All testing performed by the Contractor shall be witnessed by the Department Inspector, who shall be notified a minimum of twenty-four (24) hours in advance of the test.

3.02 DEFLECTION TESTS

A. Deflection testing of the new sewer shall be performed by the Contractor. No section of sewer shall be tested before at least 30 days have elapsed from the date of completed backfill over the section. The pipe will be observed for evidence of obvious ovality, deflected or offset joints, and other pipe defects.

B. The deflection, or deformation of the pipe due to external loading, shall not exceed approximately 7.5 percent. All labor, materials and equipment necessary for cleaning the sewers and performing the deflection testing shall be furnished by the Contractor. However, prior to the test, the Contractor's mandrel must pass a ring gauge test, performed by the Inspector at the site using the Department's ring gauge, to show that the mandrel is properly sized in accordance with the mandrel sizes listed hereinbelow 7.5 percent deflection.

C. Deflection testing the system may also be performed by the Department, at its cost, at any time during the Warranty or Contract Bond period, and the deflection in any pipe shall not exceed 7.5 percent.

D. Deflection shall be determined by passing an approved go/no go mandrel through the gravity sewer main. Deflection will be based on the average inside diameter as presented in ANSI/AWWA C900, "AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4 inches through 12 inches, for Water Distribution:", Table 1, for Poly (Vinyl Chloride) (PVC) C 900 pipe. However, no mandrel testing is required for AWWA C900 PVC pipe installed with up to 14 feet of cover, in accordance with subsection 1.05-C of Section UC-005.

E. The deflection may also be based on the average inside diameter as presented in ASTM D3034, Table XI.I, for PSM SDR35 PVC sewer pipe. The mandrel sizes are listed as follows:

Pipe Size Nominal (inches)	Average Inside Diameter	Mandrel 7.5% Deflection
6	5.893	5.31
8	7.891	7.09
10	9.864	8.84
12	11.737	10.51
15	14.374	12.86

F. If any pipe fails the deflection test, performed by the Contractor or by the Department, unstable conditions and/or improper bedding will be assumed. The overly deflected pipe shall be removed and replaced by the Contractor, at his expense. Re-rounding of overly deflected pipe will not be allowed. A trench to unstable conditions, as shown on Department Standard Detail SS 18.0, shall be excavated and new pipe installed to unstable soil condition specifications. New replacement pipe shall be connected to existing pipe to remain with new double bell PVC repair couplings (no stop) with a maximum 1-inch gap between the pipes inserted therein. The couplings shall conform to the Specifications herein for PVC pipe and fittings. The Contractor shall furnish the Department with a new one year Warranty or Contract Bond guaranteeing the replacement work and materials under the same terms and conditions as the original new Warranty or Contract Bond. The new warranty period shall commence from the Department's acceptance of the replacement work performed by the Contractor.

END OF SECTION

SECTION UC-370

CLEANING AND TESTING GRAVITY SEWERS

PART 1 - GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish all material, labor and equipment necessary to clean and test gravity sewers and sanitary force mains and shall conduct all testing required, under the direction of the Engineer.

1.03 QUALITY ASSURANCE

Cleaning and testing shall be performed in strict accordance with these specifications.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 GENERAL

A. All drain and gravity sewer line segments or sections shall be separately and individually lamped and tested for infiltration and exfiltration, unless otherwise allowed by the Engineer. A line “segment” or “section” shall be defined as a run of pipe between a manhole and the next manhole either up or down stream of that manhole.

B. Each section of gravity pipe sewer, upon its completion or at such other time as the Engineer may direct, is to be cleaned, tested and inspected.

C. The allowable limits of infiltration or exfiltration or leakage for the drain or sewer lines, or any portion thereof shall not exceed the appropriate rate as specified in 3.04 “Tightness Standards”, below. Duration of tests shall be a minimum of two hours.

D. Since allowable leakage is defined in gallons per hour, testing shall be conducted in, at a minimum, two independent one-hour test periods. Testing shall continue for additional one-hour periods if during any subsequent test period leakage increases above that of any previous test period even if the leakage is within the allowable amount. Testing shall continue until the leakage stabilizes or decreases.

E. When allowed by the Engineer in writing, longer portions of the line may be tested. However, no more than three manhole sections or 1000 feet of sewer (whichever is the lesser) shall be tested at any one time.

F. When multiple sections of line are tested together as specified above, the leakage

shall be calculated based on the footage of the smallest segment being tested as if all of the leakage originated in the shortest segment of the group.

G. Prior to testing for infiltration, the system shall be pumped out so that normal infiltration conditions exist at the time of testing. The amounts of infiltration or exfiltration shall be determined by pumping into or out of calibrated drums, or by other approved methods.

H. The exfiltration test will be conducted by filling the portion of the system being tested with water to a level which will provide a minimum head of 2-feet in a lateral connected to the test portion, or, in the event there are no laterals in the test portion, a minimum difference in elevation of 5-feet between the crown of the highest portion of the drain or sewer and the test level.

I. If the ground water level is above the crown of the highest portion of the drain or sewer, the 5-foot differential shall be measured between the ground water level and the test level. Where insufficient depth of cover is available to produce a 5-foot differential, the maximum differential producible between ground water elevation and a test elevation set to avoid flow out of low manholes or into adjacent structures connected to the test section shall be used.

J. Where infiltration or exfiltration exceeds the allowable limits specified herein, the defective pipe, joints, or other faulty construction shall be located and repaired by the Contractor.

K. The Contractor shall locate and repair all leaks until the leakage is reduced to the limits specified. Any observed leaks or obviously defective joints or pipes shall be repaired or replaced as directed by the Engineer, even though the total leakage is below that specified above.

L. Lamping Test- Each section of sewer shall show, from each end, a full circle of light.

3.02 DEFECTS

In addition to the above requirements, the following shall also apply:

A. All repairs shown necessary by the tests are to be made, broken, cracked or obviously defected pipe replaced, all deposits removed, the sewer left true to line and grade, as herein specified, and entirely clean, free from lumps of cement, protruding gaskets, bulkheads, etc. and ready for use.

B. Each manhole or other appurtenance to the system shall have the specified size and form, be watertight, neatly and substantially made with the top set permanently to exact position and grade, and shall serve well and fully its intended use.

C. Any defects found in the system shall be corrected by the Contractor in accordance with the requirements of the Specifications or the MDWASD Design and Construction Standards, as approved by the Engineer.

D. In the event that a sewer line or structure, such as a manhole, leaks during the period that the Warranty or Contract Bond is in effect, the Contractor shall be required to return and replace it with a new section of pipe or manhole or, if approved by the Engineer, to eliminate infiltration leaks by external grouting or encasement. After the leaks have been stopped, all visible cracks shall be repaired inside the manhole.

3.03 ACCEPTANCE

A. No pipe installation will be accepted if the leakage is greater than that determined by the above requirements.

B. The Contractor shall locate and repair all leaks until the leakage is reduced to the limits specified. Any observed leaks or any obviously defective joints or pipes shall be repaired or replaced as directed by the Department, even though the total leakage is below that specified above.

C. The tests and repairs shall be continued or repeated until the Department is assured that the leakage into or from the section of line under test is less than the amount specified.

3.04 TIGHTNESS STANDARDS

Effective since 1987 (Per Public Notice No. 9), the Department adopted new tightness standards for gravity sanitary sewers and sanitary force mains to be installed within the it's service area. The new standards for maximum allowable exfiltration rates are to minimize the risk of contaminating the County's groundwater supplies in the Biscayne Aquifer. These standards are issued to comply with those adopted into Chapter 24 of the County Code by Ordinance 86-42, and to have leakage requirements for clay and PVC pipe materials. The term "cone of influence" as used below refers to limits of wellfield protection areas as defined the County. Tightness standards are specified below:

A. GRAVITY SANITARY SEWERS

The maximum allowable exfiltration, infiltration, or leakage in gravity sanitary sewers shall be as listed below, with no allowances for manholes or laterals. The duration of all tests shall be a minimum of two (2) hours. Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed. Only the piping materials listed for each specific area will be permitted in that area, including both gravity sanitary sewers and laterals. (Where reference is made to a "10 Day Travel Time" contact the Department or DERM for further information.)

1. Residential Zoned Areas

1.1a Within cone of influence and **outside** 10 Days Travel Time:

Mains: D.I.P. - 50 gpd/in. diameter/mile
C900 PVC - 50 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC, or

X.H.C.I.(Extra Heavy Cast Iron Soil Pipe)

1.1b Within cone of influence and **within** 10 Days Travel Time:

Mains and laterals shall only be D.I.P.

1.2 Outside of cone influence:

Mains: D.I.P. - 100 gpd/in. diameter/mile
C900 PVC - 100 gpd/in. diameter/mile
PVC - 100 gpd/in. diameter/mile
V.C.P. - 100 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC, PVC, or X.H.C.I. or V.C.P.

2. Commercial Zoned Areas

2.1a Within cone of influence and **outside** 10 Days Travel Time:

Mains: D.I.P. - 20 gpd/in. diameter/mile
C900 PVC - 20 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC or X.H.C.I.

2.1b Within cone of influence and **within** 10 Days Travel Time:

Mains and laterals shall only be D.I.P.

Note: In any event and any zoned areas, the Department may require D.I.P. based on minimum cover requirements, installation in grass areas or at depths of 14 feet or greater.

2.2 Outside of cone influence:

Mains: D.I.P. - 100 gpd/in. diameter/mile
C900 PVC - 100 gpd/in. diameter/mile
PVC - 100 gpd/in. diameter/mile
V.C.P. - 100 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC, PVC, or X.H.C.I. or V.C.P.

3. Industrial Zoned Areas

3.1 Within cone of influence:

Mains: D.I.P. - 20 gpd/in. diameter/mile

Laterals: may be D.I.P. or X.H.C.I.

3.2 Outside of cone influence:

Mains: D.I.P. - 100 gpd/in. diameter/mile
V.C.P. - 100 gpd/in. diameter/mile

Laterals: may be D.I.P., X.H.C.I. or V.C.P.

B. SANITARY FORCE MAINS - ALL AREAS

1. Sanitary force mains shall be constructed of either Protecto 401 lined ductile-iron pipe and fittings or prestressed concrete plastic lined (120° T.D.C. minimum) cylinder pipe and fittings meeting current Department Specifications.

2. No such ductile-iron pipe sanitary force main shall exfiltrate or leak at a rate greater than the allowable leakage rate specified in AWWA C600 (latest edition) at a test pressure of one hundred (100) psig. The duration of all test shall be a minimum of two (2) hours. Any observed leaks or any obviously defective joints or pipes shall be repaired or replaced even when the total leakage is below that allowed.

3. No such prestressed concrete cylinder pipe sanitary force main shall exfiltrate or leak at a rate greater than one-half (2) the allowable leakage rate specified for ductile iron pipe in AWWA C600 (latest edition) at a test pressure of one hundred (100) psig. The duration of all test shall be a minimum of two (2) hours. Any observed leaks or any obviously defective joints or pipes shall be repaired or replaced even when the total leakage is below that allowed.

4. See Section UC-170, "Cleaning and Testing of Main".

END OF SECTION

APPROVED BY

Miami-Dade County
Department of Regulatory and Economic Resources
Environmental Resources Management
Sewerage Facilities Only

2022 -SEW-EXT- 00426 Date: 10/19/2023

For the Director: _____

Note: This Approval is not intended to cover structural design

TEST REQUIRED

Permittee MUST notify RER-DERM before field test is performed for:

[X] **Exfiltration** [X] **Pressure** [X] **Pump Station Start-Up**

Note: Refer to Permit Conditions

CITY OF OPA-LOCKA

LIFT STATION 9 REHABILITATION

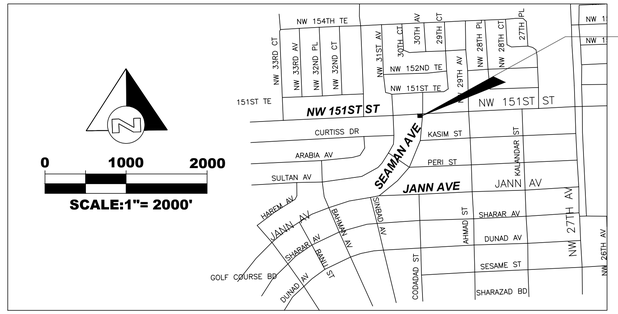
CITY COMMISSION

MAYOR: ***VERONICA WILLIAMS***

VICE MAYOR: ***JOHN H TAYLOR***

COMMISSIONER: ***DR. SHERELEAN BASS***
CHRIS DAVIS
AUDREY DOMINGUEZ

INTERIM CITY MANAGER: ***DARVIN WILLIAM***



LOCATION MAP

INDEX OF SHEETS

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C-100	*COVER SHEET*
C-200 TO C-201	*GENERAL NOTES*
C-300	*SANITARY SEWER PLAN AND PROFILE*
C-301	*SANITARY SEWER DETAILS*
C-310	*MECHANICAL PLAN AND PUMP DATA*
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E-1	*ELECTRICAL GENERAL NOTES*
E-2	*ELECTRICAL SITE PLAN*
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CA# 29695

RUBEL SIDDIQUE LICENSE No. 67239 STATE OF FLORIDA PROFESSIONAL ENGINEER

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RUBEL SIDDIQUE, PE. ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

NOTE:

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

Rubel Siddique Digitally signed by Rubel Siddique Date: 2023.05.25 10:31:27 -04'00'

PREPARED BY: ***SSN ENGINEERING, LLC***
ENGINEER OF RECORD: ***RUBEL SIDDIQUE, PE***
FL PE NO.: ***67239***

SHEET NO.
C-100

STANDARD REQUIREMENTS FOR WATER AND SEWER CONSTRUCTION (GS 0.5-SHEET 1 OF 2)

1. ALL MATERIALS AND CONOSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI–DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.

2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 3'–0" MIN. UNDER RIGID PAVEMENT.

3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 53 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.

4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AT THE POINT OF ENTRY.

5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.

6. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY THE MIAMI–DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.

7. CONTRACTOR MUST CALL M–DWASD INSPECTION DIVISION TO ARRANGE FOR A PRE–CONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.

8. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT.
   a. EASEMENTS, IF REQUIRED.
   b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN.
   c. ABSOLUTE BILL OF SALE.
   d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT). ii. DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT).
   e. "AS–BUILT" PRINTS 24"x36" SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF All WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED FLORIDA SURVEYOR, ALONG WITH PRINTS OF "AS–BUILT WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR. (No. OF PRINTS: 3–FOR WATER, 4–FOR GRAVITY SEWER AND 5–FOR FORCE MAIN OR PUMP STATION PROJECTS). THE DEPARTMENT RESERVES THE RIGHT TO REQUIRE SUBMITTAL ON ELECTRONIC MEDIA IN ACCORDANCE WITH SEC. 01775 "MAGNETIC MEDIA SUBMITTAL".
   f. H.R.S. LETTER OF RELEASE REQUIRED FOR All WATER PROJECTS.
   g. Bill OF SALE SKETCH (8 1/2"x11") FOR WATER AND SEWER, SEPARATELY.

11. All NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.

12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR All NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.

13. UNLESS OTHERWISE SPECIFIED, All TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS Will BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES Will THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.

"AS-BUILT" REQUIREMENTS FOR WATER AND SEWER CONSTRUCTION (GS 0.5- SHEET 2 OF 2)

1. AT THE COMPLETION OF ANY WATER AND SEWER JOB, EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT:

a. AS–BUILT PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER. (QTY. OF PRINTS, AS REQUIRED BY THE DEPARTMENT.)

2. "AS–BUILT" FORMAT:

a. 24"x36" PRINTS
b. LOCATION MAP SCALE SHOULD BE 1"=300' AND SECTION –TOWNSHIP–RANGE SHOULD BE SHOWN.
c. THE WORD "AS–BUILT" IN LARGE LETTERS.
d. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION.
e. PREFERRED SCALE TO BE I"= 40' HORIZONTALLY AND I"= 4' VERTICALLY*.
f. STREET NOMENCLATURE.
g. SEPARATE AS–BUILTS FOR WATER AND SEWER.
h. SEPARATE WATER AND SEWER PROFILE.
i. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E., CL,SL , ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN.
j. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT.
k. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC).
l. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY "AS–BUILT" INFORMATION REFLECTED IN DRAWINGS.

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3. WATER "AS–BUILTS" MUST INCLUDE:

a. PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES, HYDRANTS AND FITTINGS AT THE MAINLINE (IF PERPENDICULAR TO IT), AND AT MAIN AND END OF SERVICES IF ANY, OTHER ANGLE, AND DEFLECTION OF PIPE, IF ANY.
b. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.

4. SEWER "AS–BUILTS" MUST INCLUDE:

a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, IF ANY (FORCE MAIN ONLY), AND LOCATION OF LATERALS WITH REFERENCE TO MANHOLE.
b. PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH , ETC), AND STATION STARTING AT EACH 0+00 AT DOWNSTREAM MANHOLE.

5. FORCE MAIN "AS–BUILT" SAME AS WATER MAIN ABOVE.
6. EACH AS–BUILT SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT. OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPA OF DRAWINGS.

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RUBEL SIDDIQUE, PE. ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

RER-DERM WATER-SEWER GENERAL NOTES

1. A horizontal distance of at least 6 feet, and preferably 10 feet (outside to outside), shall be maintained between gravity or pressure sewer pipes and water pipes. The minimum horizontal separation can be reduced to 3 feet for vacuum-type sewers or for gravity sewers where the top of the sewer pipe is at least 6 inches below the bottom of the water pipe. When the above specified horizontal distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.
   c) The top of the sewer is at least 18 inches below the bottom of the water pipe.

2. A vertical distance of at least 12 inches (outside to outside) shall be maintained between any water and sewer mains with sewer pipes preferably crossing under water mains. The minimum vertical separation can be reduced to 6 inches for vacuum-type sewers or for gravity sewers where the sewer pipe is below the water main. The crossing shall be arranged so that all water main joints are at least 6 feet from all joints in gravity and pressure sewer pipes. This distance can be reduced to 3 feet for vacuum-type sewers. When the above specified vertical distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.

3. Air release valves shall be provided at high points of new force main sanitary sewers.

4. Gravity sanitary sewers constructed within a public wellfield protection area shall be C-900 PVC or Ductile Iron Pipe. The maximum allowable exfiltration rate of gravity sanitary sewers constructed in a public wellfield protection area shall be:
   a) Residential Land Uses. Fifty (50) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   b) Non-Residential Land Uses. Twenty (20) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.

5. The maximum allowable exfiltration rate of gravity sanitary sewers constructed outside a public wellfield protection area shall be one hundred (100) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe. Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.

6. Forcemain sanitary sewers constructed within a public wellfield protection area shall be ductile iron, C-900 PVC, HDPE or reinforced concrete pressure sewer pipes.

7. The maximum allowable exfiltration/leakage rate of forcemain sanitary sewers shall be:
   a) Ductile Iron, C-900 PVC, HDPE and PVC Pipe. The allowable leakage rate specified in American Water Works Association Standard (AWWAS) C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   b) Reinforced Concrete Pressure Pipe. Half (1/2) the allowable leakage rate specified in AWWA C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.

8. The contractor shall verify nature, depth, and character of existing underground utilities prior to start of construction.

9. In no case shall a contractor install utility pipes, conduits, cables, etc. in the same trench above an existing water or sewer pipe except where they cross.

10. If any area of the work site is found to contain buried solid waste and/or ground or ground water contamination, the following shall apply:
    a) All work in the area shall follow all applicable safety requirements (e.g., OSHA, etc.) and notification must be provided to the appropriate agencies.
    b) Immediately notify the Environmental Monitoring and Restoration Division (EMRD). The EMRD can be contacted at (305) 372-6700.
    c) If contaminated soils and/or buried solid waste material is excavated during construction, then they require proper handling and disposal in accordance with the local, state and federal regulations. Be advised that the landfill owner/operator is the final authority on disposal and may have requirements beyond those provided by herein. If disposal within a Miami-Dade County owned landfill (Class I landfill) is appropriate and selected, please contact the Miami-Dade County Department of Solid Waste Management at (305) 594-6666 for information.
    d) The reuse of contaminated soils that are not returned to the original excavation requires prior approval of a Soil Management Plan from the Environmental Monitoring and Restoration Division. The EMRD can be contacted at (305) 372-6700.

11. Pumps must comply with the National Electrical Code (NEC) requirements for Class I, Group D, Division 1 locations (Explosion Proof).

12. The contractor is advised that a Tree Removal/Relocation Permit may be required prior to the removal and/or relocation of tree resources. Prior to removing or relocating any trees, the Contractor shall notify the Tree and Forest Resources Section of DERM at (305) 372-6574 or via e-mail at: tfrs@miamidade.gov , or contact the municipality with tree ordinance jurisdiction to obtain any required permits. Those trees not interfering with the construction shall be protected in place in accordance with the provisions of Section 24-49.5 of the Miami-Dade Code.

13. Please note that the demolition, removal, and/or disturbance of existing underground utilities that contain asbestos- cement pipes (ACP) are subject to the provisions of 40 CFR-61 Subpart M. Therefore, pursuant to the provisions of 40 CFR-61-145, a NOTICE OF DEMOLITION OR ASBESTOS RENOVATION form must be filed with the Air Quality Management Division (AQMD) of DERM, at least ten (10) working days prior to starting of any work. Note that the backfilling and burial of crushed ACP would cause these locations to be considered active disposal sites and subject to 40 CFR-61.154, and 40 CFR-61.151 a year after project completion.
    Existing standard operating procedures, as well as applicable federal, state and local regulatory criteria, must be followed and implemented to minimize any potential release of fugitive emissions, especially during project construction activities. The AQMD can be contacted via email at asbestos@miamidade.gov or 305-372-6925.

Rev. 4/30/2018
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FOR ALL PROJECT WHERE REMOVAL OF UTILITY LINES IS PROPOSED

1– ALL EXISTING UTILITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN IN EFFECT AND IN SERVICE, UNTIL SUCH TIME WHEN PROPOSED REPLACING UTILITIES HAVE BEEN INSTALLED AND IN SERVICE AND ALL RELATED SERVICES TO THE FIRST LINES HAVE BEEN TRANSFERRED TO THE LATTER ONES, BY M–DWASD FORCES AT OWNERS EXPENSES.

2– ALL ABANDONED OR REPLACED UTILITY LINES LOCATED IN PRIVATE PROPERTY SHALL BE REMOVED AND CAPPED AT MAIN, WHEN APPLICABLE, AFTER ALL INSTALLED SERVICES TO OR FROM THEM HAVE BEEN TRANSFERRED TO THE ALREADY INSTALLED AND IN SERVICE PROPOSED UTILITY LINES, ANY RELATED EASEMENT SHALL BE RELEASED AND VACATED AFTER REMOVAL OF LINES AND RESTORATIONS OF SITE, IF APPLICABLE, HAVE BEEN COMPLETED.

NO.	REVISIONS	DATE	BY

SSN ENGINEERING, LLC
13899 BISCAYNE BLVD., STE 310
NORTH MIAMI BEACH, FL 33181
PH (954) 944-3272
FBPE NO. CA00029695
WWW.SSNENGINEERING.COM

PROJECT NO.
202201002

CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

GENERAL NOTES

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239
Rubel Siddique — Digitally signed by Rubel Siddique Date: 2023.05.25 10:32:22 -04'00'

RUBEL SIDDIQUE LICENSE No. 67239 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWN BY: RS
CHECKED BY: RS
DATE: 09-05-2022
SHEET NO.
C-200

1. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF OPA-LOCKA AND/OR MIAMI-DADE COUNTY WATER & SEWER DEPARTMENT (MD-WASD) AND/OR MIAMI DADE COUNTY PUBLIC WORKS DEPARTMENT (MD-PWD) AND/ OR THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT.

2. MINIMUM COVER OVER MAINS SHALL BE 3'-0". 2'-0" FOR SERVICE LINES, UNLESS SPECIFIC WRITTEN EXCEPTION IS ISSUED OR REQUIRED BY AN AUTHORIZED REPRESENTATIVE OF CITY OF OPA-LOCKA.

3. DETECTOR TAPE SHALL BE INSTALLED 18" ABOVE THE CENTERLINE OF MAINS AND SERVICES. TAPES SHALL BE GREEN CONTINUOUSLY MARKED "CAUTION WASTEWATER FORCE MAIN BURIED BELOW".

4. ALL VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND No. 53 C.I. VALVE BOXES AND LIDS.

5. LOW PRESSURE SEWER MAIN SHALL BE HDPE SDR-11. SERVICE LINES SHALL BE HDPE SDR-9.

6. ALL JOINTS FOR LOW PRESSURE HDPE MAIN SHALL BE BUTT-FUSION WELDED. ALL WELDING OF JOINTS SHALL BE IN STRICT CONFORMITY WITH THE RECOMMENDATIONS OF THE PIPE MANUFACTURER UNLESS OTHERWISE SPECIFIED IN WRITING.

7. CONTRACTOR MUST CALL THE CITY OF OPA-LOCKA INSPECTION DIVISION AND ALL OTHER APPLICABLE PERMITTING AGENCIES TO ARRANGE FOR A PRE-CONSTRUCTION MEETING AT LEAST 72 HOURS PRIOR TO PROPOSED START OF CONSTRUCTION.

8. CITY OF OPA-LOCKA PERSONNEL WILL INSPECT ALL FACILITIES APPROVED BY THE ENGINEERING DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.

9. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY CITY OF OPA-LOCKA:

*EASEMENTS, IF REQUIRED (WHETHER BY DEED OR PLAT SUITABLY RECORDED)
* CONTRACTOR'S WAIVER AND RELEASE OF LIEN
* CONTRACTOR'S LETTER OF WARRANTY (I.E. LETTER AGREEMENT)
* AS-BUILT 24" x 36" SHOWING SPECIFIC LOCATIONS, DEPTHS, ETC. OF ALL WATER FACILITIES AS LOCATED BY A LICENSED SURVEYOR, ALONG WITH TWO (2) PRINTS OF THE "AS-BUILT" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR OR ENGINEER OF RECORD AND ENDORSED BY THE CONTRACTOR IN ACCORDANCE WITH MD-WSD STANDARDS.

10. ALL NEW CONNECTIONS FROM EXISTING CITY OF OPA-LOCKA MAINS TO BE INSPECTED BY CITY OF OPA-LOCKA FORCES PRIOR TO BACKFILL.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL LOCATIONS, DIMENSIONS, ELEVATIONS AND THE LOCATIONS OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE LOCATIONS SHOWN ON THE PLANS ARE NOT GUARANTEED ACCURATE OR CORRECT BY THE KNOWN UTILITY COMPANIES.

12. THRUST BLOCKS SHALL BE PROVIDED TO ALL BENDS, TEES AND PLUGS IN ACCORDANCE WITH MD-WASD STANDARD DETAILS.

13. PIPE INSTALLATION, CLEANING, FLUSHING, AND TESTING, AS PER CITY OF OPA-LOCKA AND STATE OF FLORIDA STANDARDS FOR THE INSTALLATION OF PRESSURE SEWER BY CUSTOMER DONATION PROJECTS.

14. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF INSPECTIONS FOR ANY CONSTRUCTION ACTIVITIES OCCURRING OUTSIDE NORMAL WORKING HOURS (8:00 a.m. TO 5:00 p.m.) SATURDAYS AND SUNDAYS AND HOLIDAYS EXCLUDED AND ARRANGEMENTS FOR INSPECTIONS OUTSIDE NORMAL WORKING HOURS MUST BE MADE A MINIMUM OF 48 HOURS IN ADVANCE OF THE CONSTRUCTION ACTIVITY.

15. ALL TRENCHES TO BE EXCAVATED AND BACKFILLED AS PER THE MD-WASD DETAIL GS-1.9.

16. SURFACE RESTORATION, PAVEMENT REPLACEMENT, SIDEWALK REPLACEMENT, TRENCH BACKFILLING AND COMPACTION SHALL COMPLY WITH THE APPLICABLE CURRENT MD-WASD, MD-PWD AND FDOT STANDARDS.

17. THE ENGINEER OF RECORD SHALL PROVIDE CITY OF OPA-LOCKA WITH A SIGNED AND SEALED PRESSURE TEST REPORT CERTIFYING PRESSURE TEST RESULTS.

18. FIELD LEAK TESTING OF POLYETHYLENE (PE) PRESSURE PIPING SYSTEMS USING HYDROSTATIC PRESSURE SHALL BE CONDUCTED BY THE CONTRACTOR FOLLOWING METHODS AND PROCEDURES NOTED ASTM DESIGNATION: F2164-13

19. A HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. WHEN A 10 FEET HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, THIS HORIZONTAL DISTANCE MAY BE REDUCED TO 6 FEET. IF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF A GRAVITY SANITARY SEWER, THIS HORIZONTAL DISTANCE MAY BE REDUCED TO 3 FEET.

20. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING AND THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO A COMPLETE EVALUATION OF EXISTING AND PROPOSED CONDITIONS.

21. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.

22.TRENCH EXCAVATION PROTECTION SHALL BE ACCOMPLISHED AS REQUIRED BY THE PROVISIONS OF PART 1926, SUBPART P, EXCAVATIONS, TRENCHING AND SHORING OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS STANDARDS AND INTERPRETATIONS.

23. ALL ABOVE GROUND PIPE & FITTING, VALVE BOXES, AIR RELEASE VALVE COVERS AND ANY OTHER MARKING DEVICE, SHALL BE COLOR CODED IN ACCORDANCE WITH THE UTILITY LOCATION & COORDINATION COUNCIL UNIFORM COLOR CODE AS SHOWN IN MIAMI-DADE COUNTY WATER & SEWER DEPARTMENT (MD-WASD).

NOTES FOR CONTAMINATED SITES

IF ANY AREA OF THE WORK SITE IS FOUND TO CONTAIN BURIED SOLID WASTE AND/OR GROUND OR GROUND WATER CONTAMINATION, THE FOLLOWING SHALL APPLY:

1. ALL WORK IN THE AREA SHALL FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS (E.G., OSHA, ETC.) AND NOTIFICATION MUST BE PROVIDED TO THE APPROPRIATE AGENCIES.

2. IMMEDIATELY NOTIFY THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION (EMRD). THE EMRD CAN BE CONTACTE AT (305) 372-6700.

3. IF CONTAMINATED SOILS AND/OR BURIED SOLID WASTE MATERIAL IS EXCAVATED DURING CONSTRUCTION, THEN THEY REQUIRE PROPER HANDLING AND DISPOSAL IN ACCORDANCE WITH THE LOCAL, STATE AND FEDERAL REGULATIONS. BE ADVISED THAT THE LANDFILL OWNER/OPERATOR IS THE FINAL AUTHORITY ON DISPOSAL AND MAY HAVE REQUIREMENTS BEYOND THOSE PROVIDED BY HEREIN. IF DISPOSAL WITHIN A MIAMI-DADE COUNTY OWNED LANDFILL (CLASS I LANDFILL) IS APPROPRIATE AND SELECTED, PLEASE CONTACT THE MIAMI-DADE COUNTY DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT AT (305) 594-1670 FOR INFORMATION.

4. THE REUSE OF CONTAMINATED SOILS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION. THE EMRD CAN BE CONTACTED AT (305) 372-6700.

5. A SUBSURFACE INVESTIGATION WAS CONDUCTED BY ENVIRONMENTAL REGULATORY COMPLIANCE, INC. (ERC) DATE MARCH 2022. THE REPORT STATED THAT THE PRESENCE OF SOLID WASTE MIXED WITH OTHER MATERIAL (CARBONATE AND SILICA SAND, LIMEROCK, AND ORGANIC MATERIAL) WILL NOT SUBSIDE BY THE INSTALLATION OF THE 2 INCH SEWER LINE.

DESIGN APPROACH

1. A SUBSURFACE INVESTIGATION WAS CONDUCTED BY ENVIRONMENTAL REGULATORY COMPLIANCE, INC. (ERC) DATE MARCH 2022. THE REPORT STATED THAT THE PRESENCE OF SOLID WASTE MIXED WITH OTHER MATERIAL (CARBONATE AND SILICA SAND, LIMEROCK, AND ORGANIC MATERIAL) WILL NOT SUBSIDE BY THE INSTALLATION OF THE 2 INCH SEWER LINE.

2. DUE THE UNDERLYING SOIL CONDITION OF THE SITE, HDPE PIPE WAS USED TO ADDRESS ANY CONTAMINATION ISSUES. ACCORDING TO THE PIPE MANUFACTURER, POLYETHYLENE IS NON-CONDUCTIVE AND IMMUNE TO GALVANIC AND ELECTROCHEMICAL EFFECTS. THUS POLYETHYLENE WILL NOT CORRODE IN THE MANNER OF METAL AND CONCRETE PIPING. PERFORMANCE POLYETHYLENE PIPES HAVE OUTSTANDING RESISTANCE TO A WIDE RANGE OF CHEMICALS AND ENVIRONMENTAL CONDITIONS, MAKING THEM IDEAL CANDIDATES FOR USE WITH CORROSIVE FLUIDS AND CHEMICALS, AND UNDER HARSH ENVIRONMENTAL CONDITIONS.

3. ALL THE JOINT IN THE HDPE PIPES WILL BE FUSED JOINT, THERFORE NO POSSIBILITY OF JOINT LEAKING.

Digitally signed by Airia Austin
Date: 2023.05.30 15:45:44 -04'00'

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RUBEL SIDDIQUE, PE. ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

NO.	REVISIONS	DATE	BY

SSN ENGINEERING, LLC
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PH (954) 944-3272
FBPE NO. CA00029695
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SSN ENGINEERING

PROJECT NO.
202201002

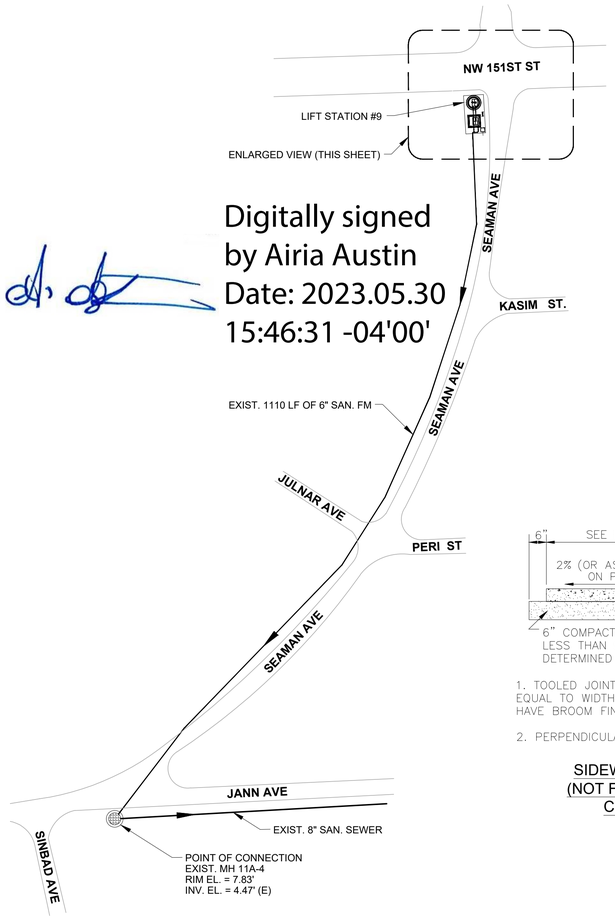
CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

GENERAL NOTES

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239
Rubel Siddique Digitally signed by Rubel Siddique Date: 2023.05.25 10:32:41 -04'00'

RUBEL SIDDIQUE LICENSE No. 67239 STATE OF FLORIDA PROFESSIONAL ENGINEER

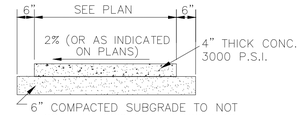
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CHECKED BY: RS
DATE: 09-05-2022
SHEET NO.
C-201



Digitally signed by Airia Austin
Date: 2023.05.30 15:46:31 -04'00'

OVERALL VIEW OF POINT OF CONNECTION

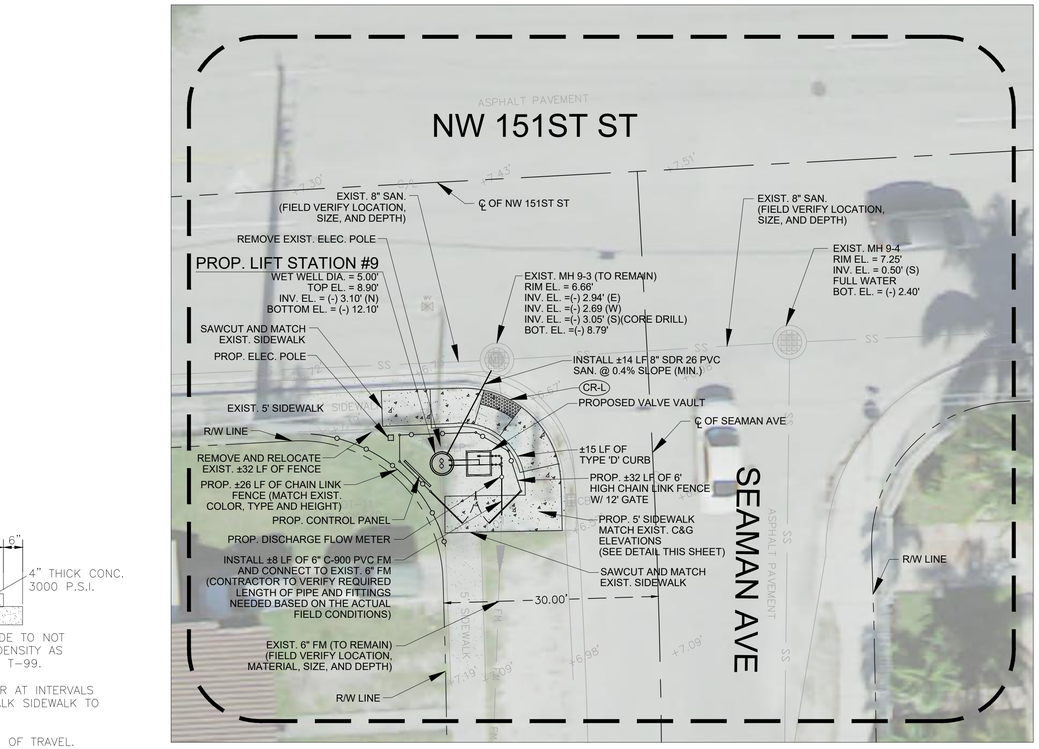
N.T.S.



1. TOOLED JOINTS TO OCCUR AT INTERVALS EQUAL TO WIDTH OF SIDEWALK SIDEWALK TO HAVE BROOM FINISH

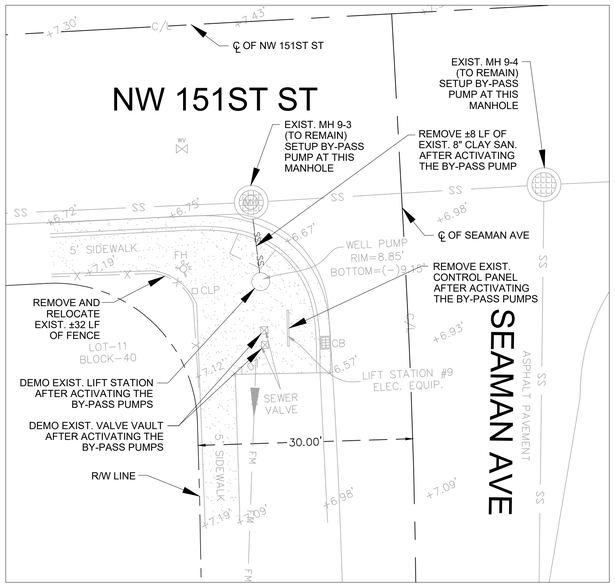
2. PERPENDICULAR TO PATH OF TRAVEL.

SIDEWALK DETAILS
(NOT FOR DRIVEWAY CROSSING)
N.T.S.



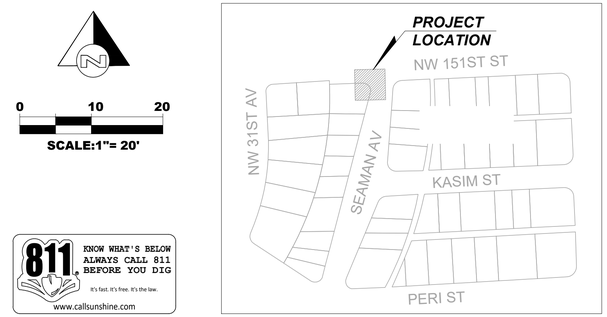
ENLARGED VIEW

1" = 10'



SITE DEMOLITION PLAN

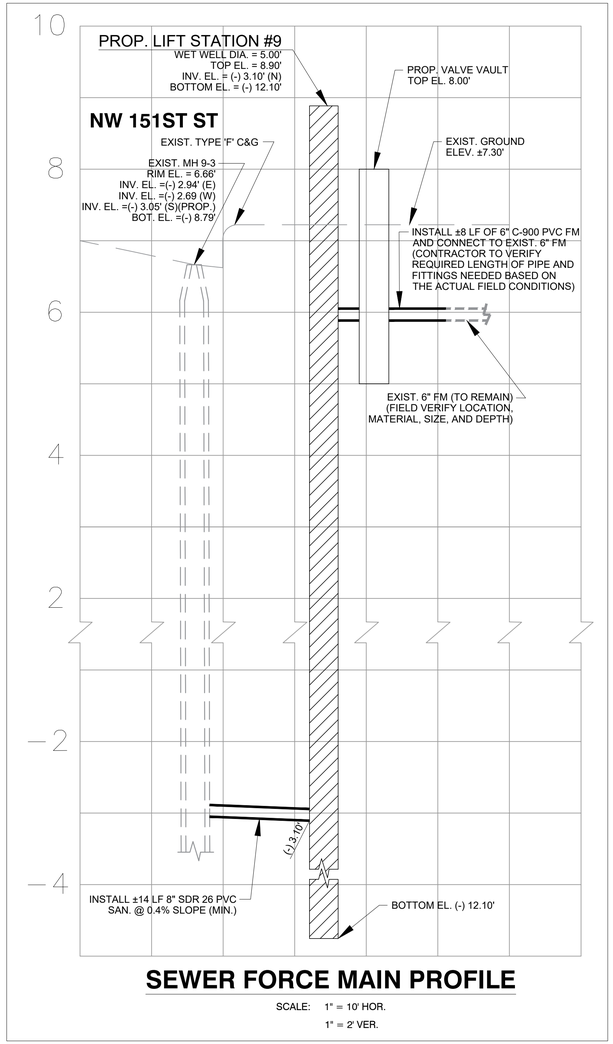
1" = 10'



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LOCATION MAP

N.T.S.



SEWER FORCE MAIN PROFILE

SCALE: 1" = 10' HOR.
1" = 2' VER.



CONTROL PANEL

(SEE ELECTRICAL PLANS FOR DETAILS)

GENERAL NOTES:

1. CONTRACTOR SHALL MAINTAIN FUNCTION OF SEWAGE PUMPING DURING CONSTRUCTION BY UTILIZING BY-PASS PUMPING SYSTEM, FITTINGS AND VALVES AS REQUIRED. CONTRACTOR SHALL SUBMIT A PLAN OUTLINING SEWAGE "BY-PASS" PROCEDURE TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.
2. THE EXISTING UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE CITY OF OPA-LOCKA WATER AND SEWER ATLAS, SURVEY AND SITE VISIT. CONTRACTOR MUST VERIFY SIZE, LOCATION, AND INVERTS OF ALL UTILITIES PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL PERFORM ALL WORK WITHIN LEGAL PROPERTY AND EASEMENT, AND SHALL NOT DISTURB ADJACENT PROPERTY.
4. CONTRACTOR SHALL VERIFY EXISTING PIPING TO REMAIN BEFORE ORDERING PROPOSED PIPING/FITTINGS CONNECTING TO IT.
5. CARE SHOULD BE TAKEN TO AVOID DISTURBING ELECTRICAL SERVICE IN THE AREA UNDER CONSTRUCTION.
6. CONTRACTOR SHALL INCLUDE NECESSARY CUTTING, PATCHING, AND RESTORATION OF ALL EXISTING SURFACES TO MATCH SURROUNDING AREAS.
7. CONTRACTOR TO COAT ALL UNDERGROUND FITTINGS THOSE ARE IN DIRECT CONTACT WITH SOIL WITH TWO COATS OF BITUMASTIC OR APPROVED EQUAL.
8. ELEVATIONS INDICATED HEREON ARE IN FEET AND DECIMALS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).
9. THE MINIMUM WET-WELL BOTTOM SLOPE SHALL BE 2:1 TO ALLOW SELF-CLEANING AND MINIMUM DEPOSIT OF DEBRIS.
10. THE ELECTRICAL SYSTEMS AND COMPONENTS IN RAW WASTEWATER WET WELLS SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE REQUIREMENTS FOR CLASS I, GROUP D, DIVISION 1.
11. THE STATION SHOULD BE EQUIPPED WITH MISSION M850 RTUs FOR REAL-TIME ALARMS AND STREAMING DATA OR APPROVED EQUAL.
12. FLOW METER SHALL BE ABB ELECTROMAGNETIC FLOWMETER DN150 (6") OR APPROVED EQUAL.

LEGEND

- R/W LINE OR PROPERTY LINE
- BUILDING OUTLINE
- SD — EXISTING STORM PIPE
- WM — EXISTING WATER PIPE
- SS — EXISTING SAN. SEWER PIPE
- EXISTING SAN. SEWER MANHOLE
- 7.31 — EXISTING GRADE ELEVATION
- PROPOSED FORCE MAIN
- EXISTING FIRE HYDRANT

NOTE:
ALL ELEVATIONS REFER TO NGVD 1929.
NAVD88 = NGVD29 - 1.55

NO.	REVISIONS	DATE	BY

SSN ENGINEERING, LLC
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NORTH MIAMI BEACH, FL 33181
PH (954) 944-3272
FBPE NO. CA00029695
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SSN ENGINEERING

PROJECT NO.
202201002

CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

SANITARY SEWER PLAN AND PROFILE

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

Rubel Siddique
Digitally signed by Rubel Siddique
Date: 2023.05.25 10:33:00 -04'00'

RUBEL SIDDIQUE LICENSE No. 67239 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWN BY:	RS
CHECKED BY:	RS
DATE:	04-07-2023
SHEET NO.	C-300

1. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.
2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4'-0" MIN.
3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 53 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.
4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND CHECK VALVE AT THE POINT OF ENTRY.
5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.
6. ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT PROVIDING THE APPROPRIATE CHARGES HAVE BEEN PREPAID.
7. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY THE MIAMI-DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.
8. CONTRACTOR MUST CALL M-DWASD INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.
9. CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THE DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.
10. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT.
    a. EASEMENTS, IF REQUIRED.
    b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN.
    c. ABSOLUTE BILL OF SALE.
    d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT).
       ii. DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT).
    e. "AS-BUILT" PRINTS 24"x36" SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED FLORIDA SURVEYOR, ALONG WITH PRINTS OF "AS-BUILT" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR. (No. OF PRINTS: 3-FOR WATER, 4-FOR GRAVITY SEWER AND 5-FOR FORCE MAIN OR PUMP STATION PROJECTS). THE DEPARTMENT RESERVES THE RIGHT TO REQUIRE SUBMITTAL ON ELECTRONIC MEDIA IN ACCORDANCE WITH SEC. 01775 "MAGNETIC MEDIA SUBMITTAL".
    f. H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS.
    g. BILL OF SALE SKETCH (8½"x11") FOR WATER AND SEWER, SEPARATELY.
11. ALL NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.
12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR ALL NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.
13. UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.

ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
03/01/2010	V.F.C.

STANDARD DETAIL
STANDARD REQUIREMENTS WATER AND SEWER CONSTRUCTION

GS 0.5 SHEET 1 OF 2

1. AT THE COMPLETION OF ANY WATER AND SEWER JOB, EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT:
    a. AS-BUILT PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER. (QTY. OF PRINTS, AS REQUIRED BY THE DEPARTMENT.)
2. "AS-BUILT" FORMAT:
    a. 24"x36" PRINTS
    b. LOCATION MAP SCALE SHOULD BE 1"=300' AND SECTION-TOWNSHIP-RANGE SHOULD BE SHOWN.
    c. THE WORD "AS-BUILT" IN LARGE LETTERS.
    d. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION.
    e. PREFERRED SCALE TO BE 1"= 40' HORIZONTALLY AND 1"= 4' VERTICALLY*.
    f. STREET NOMENCLATURE.
    g. SEPARATE AS-BUILTS FOR WATER AND SEWER.
    h. SEPARATE WATER AND SEWER PROFILE.
    i. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E., ℄, ℄, ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN.
    j. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT.
    k. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC).
    l. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY "AS-BUILT" INFORMATION REFLECTED IN DRAWINGS.
3. WATER "AS-BUILTS" MUST INCLUDE:
    a. PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES, HYDRANTS AND FITTINGS AT THE MAINLINE (IF PERPENDICULAR TO IT), AND AT MAIN AND END OF SERVICES IF ANY, OTHER ANGLE, AND DEFLECTION OF PIPE, IF ANY.
    b. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.
4. SEWER "AS-BUILTS" MUST INCLUDE:
    a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, IF ANY (FORCE MAIN ONLY), AND LOCATION OF LATERALS WITH REFERENCE TO MANHOLE.
    b. PROFILE SHOWING MANHOLE (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH , ETC), AND STATION STARTING AT EACH 0+00 AT DOWNSTREAM MANHOLE.
5. FORCE MAIN "AS-BUILT" SAME AS WATER MAIN ABOVE.
6. EACH AS-BUILT SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.

* OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPT OF DRAWINGS.

ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
03/11/2009	V.F.C.

STANDARD DETAIL
"AS-BUILT" REQUIREMENTS

GS 0.5 SHEET 2 OF 2

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING AT CROSSINGS (FULL JOINT CENTERED)
STORM SEWER; SANITARY SEWER FORCE MAIN; RECLAIMED WATER (2)	Water Main — 3 ft. minimum	Water Main — 12 inches is the minimum, 24 inches preferred when 6 inches is the minimum and 12 inches is preferred	Maintain 3 ft. minimum — Water Main
VACUUM SANITARY SEWER	Water Main — 10 ft. preferred 3 ft. minimum	Water Main — 12 inches preferred 6 inches minimum	Maintain 3 ft. minimum — Water Main
GRAVITY OR PRESSURE; SANITARY SEWER FORCE MAIN; RECLAIMED WATER (4)	Water Main — 10 ft. preferred 6 ft. minimum (3)	Water Main — 24 inches is the minimum, 42 inches is the preferred, 5 inches is the minimum and 12 inches is preferred	Maintain 6 ft. minimum — Water Main
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 ft. minimum	-	-

NOTES
1. MAIN SHOULD BE ABOVE OTHER PIPE WHEN WATER MAIN MUST BE BELOW OTHER PIPE. THE MINIMUM SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III, OF CHAPTER 62-610, F.A.C.
3. 6 FEET MINIMUM SEPARATION REQUIRED FOR SEWAGE FLOW GREATER THAN 1 MGD.
4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

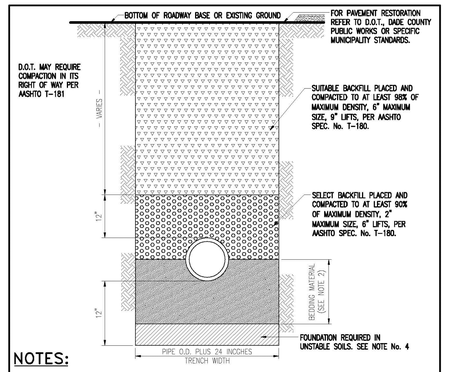
ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
10/06/2008	V.F.C.

STANDARD DETAIL
WATER AND SEWER MAINS CROSSING

GS 1.5 SHEET 1 OF 1



NOTES:
1. FOR EXCAVATION AND BACKFILL AROUND MANHOLES, APPURTENANCES, OR IN WATER, REFER TO PROVISIONS WITHIN THE SPECIFICATIONS.
2. UNLESS OTHERWISE SPECIFIED, BEDDING MATERIAL SHALL CONSIST OF SELECT BACKFILL MATERIAL 2" MAX. SIZE, OR WASHED AND GRADED LIMEROCK (3/8"-1½"), COMPACTED TO AT LEAST 90° OF MAX. DENSITY, 6" LIFTS, PER AASHTO SPEC. No. T-180.
3. WHERE REQUIRED, SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.
4. WHERE UNSTABLE SOILS ARE ENCOUNTERED, INCLUDING PEAT, MUCK OR OTHER ORGANIC SOILS, ELASTIC SILT AND CLAYS BELOW THE WATER TABLE, A FOUNDATION IS REQUIRED. COMPACTED TO AT LEAST 90° OF MAX. DENSITY, 6" LIFTS, PER AASHTO SPEC. NO. T-180. FOUNDATION MATERIAL SHALL BE SELECT BACKFILL MATERIAL, 2" MAXIMUM SIZE 6" LIFTS EXTEND EXCAVATION AT LEAST 2' DEEPER FOR FOUNDATION UNLESS SUITABLE MATERIAL IS FOUND AT A LESSER DEPTH, GREATER DEPTHS MAY BE REQUIRED FOR EXTREMELY POOR CONDITIONS.
5. POLYETHYLENE ENCASEMENT OF CAST IRON VALVES, PIPE AND FITTINGS, IF REQUIRED BY THE DEPARTMENT, SHALL BE PER ANSI/AWWA C105/A21.5, METHOD A, B OR C FOR TYPE I CLASS C TUBE, MIN. 8 MILS THK

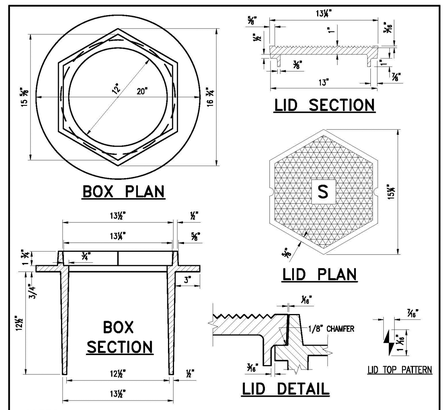
ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
11/01/2006	V.F.F.

STANDARD DETAIL
TYPICAL TRENCH BACKFILL FOR D.I. WATER AND FORCE MAINS

GS 1.9 SHEET 1 OF 1



NOTES:
1. MACHINE FINISH BOTTOM OF COVER AND SEAT OF FRAME.
2. ALL DIMENSIONS ARE NET CASTING, NOT PATTERN.
3. FOUNDRY AND LOCATION SHALL BE CAST ON BOTTOM OF THE LID. (SEE WS 2.05)
4. MINIMUM WEIGHTS: RING: 134LBS COVER: 44LBS

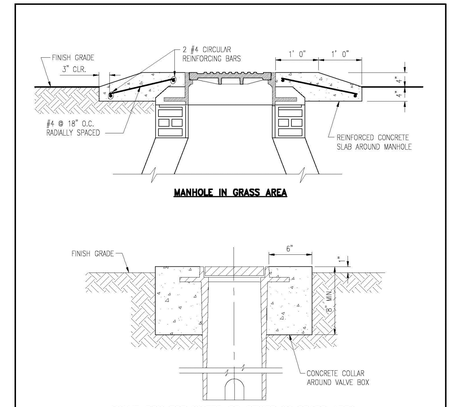
XXXXX ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY

ISSUE DATE	APPROVED BY
06/25/2015	J.B.F.

STANDARD DETAIL
No. 53 C.I. VALVE BOX AND LID

SS 13.0 SHEET 1 OF 1



NOTES:
1. A "GRASS AREA" IS ANY AREA OTHER THAN PAVED SURFACE OR A SIDEWALK AREA.
2. IN "GRASS AREAS" THE TOP OF THE CONCRETE COLLAR OR SLAB SHALL BE FINISHED WITH THE TOP OF THE VALVE BOX OR MANHOLE.
3. AREAS SUPPORTING CONCRETE COLLAR OR SLAB SHALL BE PROPERLY COMPACTED.
4. CLEARANCE OF 30 INCHES FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.

STANDARD MANHOLE VALVE BOX AND LID ITEM	WS 3.10 CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
06/01/2008	V.F.C.

STANDARD DETAIL
MANHOLE / VALVE BOX IN GRASS AREAS

SS 21.0 SHEET 1 OF 1

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RUBEL SIDDIQUE, PE. ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE.

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Digitally signed by Airia Austin
Date: 2023.05.30 15:47:16 -04'00'

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NO.	REVISIONS	DATE	BY

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SSN ENGINEERING

PROJECT NO. 202201002

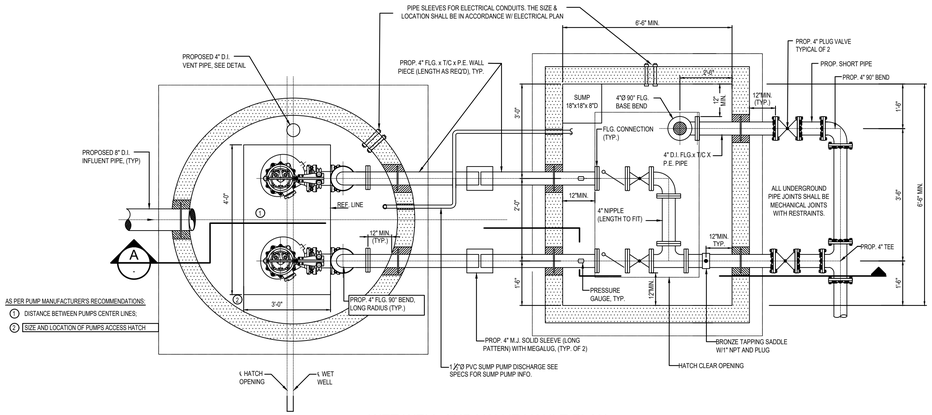
CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

SANITARY SEWER DETAILS

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239
Rubel Siddique — Digitally signed by Rubel Siddique Date: 2023.05.25 10:33:18 -04'00'

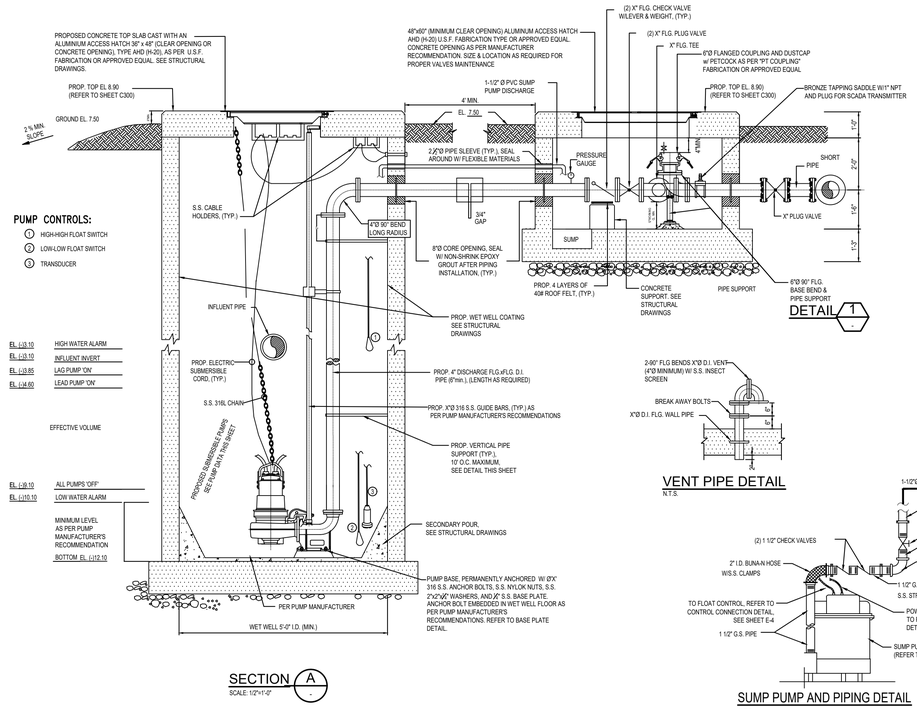
RUBEL SIDDIQUE LICENSE No. 67239 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWN BY: RS
CHECKED BY: RS
DATE: 09-05-2022
SHEET NO. C-301



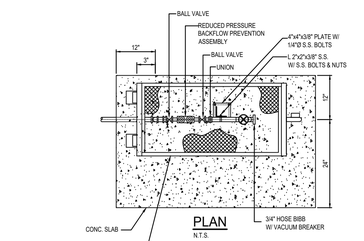
WET WELL AND VALVE VAULT PLAN

SCALE: 1/2"=1'-0"



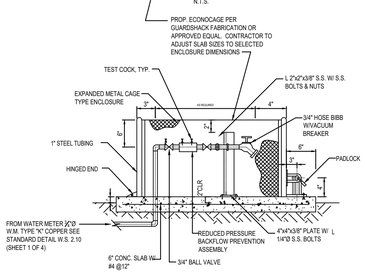
SECTION A

SCALE: 1/2"=1'-0"



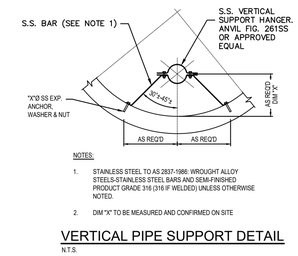
PLAN

N.T.S.



BACKFLOW PREVENTER WITH HOSE BIBB

N.T.S.



NOTES:

1. STAINLESS STEEL TO AS 2837-1986: WROUGHT ALLOY STEELS-STAINLESS STEEL BARS AND SEMI-FINISHED PRODUCT GRADE 316 (316 IF WELDED) UNLESS OTHERWISE NOTED.
2. DIM "X" TO BE MEASURED AND CONFIRMED ON SITE

VERTICAL PIPE SUPPORT DETAIL

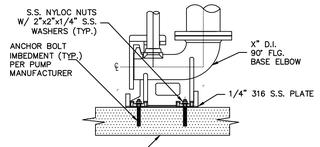
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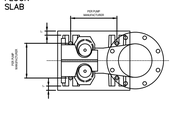
VENT PIPE DETAIL

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SUMP PUMP AND PIPING DETAIL

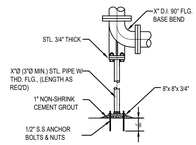
N.T.S.





BASE PLATE DETAIL

N.T.S.



GALVANIZED PIPE SUPPORT DETAIL 1

N.T.S.

PUMP DATA:		
FLUID		RAW SEWAGE
INSTALLATION LOCATION		LIFT STATION No. 9
PUMP TYPE		SUBMERSIBLE PUMP
RATED POINT	CAPACITY, GPM	172
	TDH, FEET	16.7
SHUT OFF HEAD, FT		
CONTINUOUS OPERATING RANGE	MAXIMUM TDH, FT	20
	CAPACITY, GPM	60
	MINIMUM TDH, FT	8
	CAPACITY, GPM	440
	NPSHR, FT	2.2
	PUMP EFFICIENCY AT B.E.P., %	83.5
	PUMP EFFICIENCY MIN. @ RUNOUT, %	67.9
PUMP CONSTRUCTION	CASING	CAST IRON ASTM A 48 CLASS 35B
	IMPELLER	CAST IRON ASTM A 48 CLASS 35B
	SHAFT	AISI TYPE 431 STAINLESS STEEL
	BEARINGS L-10 LIFE, HRS.	100,000
	MAX. SHAFT DEFLECTION IN OPERATING RANGE, MILS	–
	MAX. VEL. OF VIBRATIONS IN OP. RANGE, INCH/SEC	–
	SUCTION, INCHES	3"
	DISCHARGE, INCHES	3"
ELECTRIC MOTOR	RATED HP	2.68 HP
	RPM	1175
	VOLTS/PHASE/Hz/S.F.	230/ /60/
	AMBIENT TEMP. FOR MOTOR RATING, °C	39
	MAXIMUM TEMP. RISE, °C	40
	BEARINGS L-10 LIFE, HRS.	100,000
	MAX. VIBRATION AMP., MILS	-
	NOISE LEVEL, dB@1 METER	-
	NEMA DESIGN CODE LETTER	B
	START. CURR. LETTER CODE	G
	INSULATION CLASS	F
	MOTOR RATED HP NOT OVERLOADED AT ANY POINT IN THE PUMPS PERFORMANCE CURVE	
MANUFACTURERS & MODELS *	PUMP	XFP 80C CB1 60HZ
	MOTOR	

* CONTRACTOR MAY CHOOSE APPROVED EQUAL PUMPS AND SUBMIT SHOP DRAWINGS TO THE EOR FOR APPROVAL PRIOR TO INSTALLATION

RUBEL SIDDIQUE, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67239

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RUBEL SIDDIQUE, PE. ON THE DATE INDICATED HERE USING A SHA AUTHENTICATION CODE.

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Date: 2023.05.30 15:48:03 -04'00'

NO.	REVISIONS	DATE	BY

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PROJECT NO.
202201002

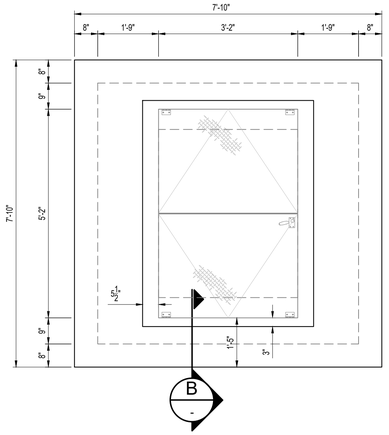
CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

MECH-PLAN-PUMP-DATA

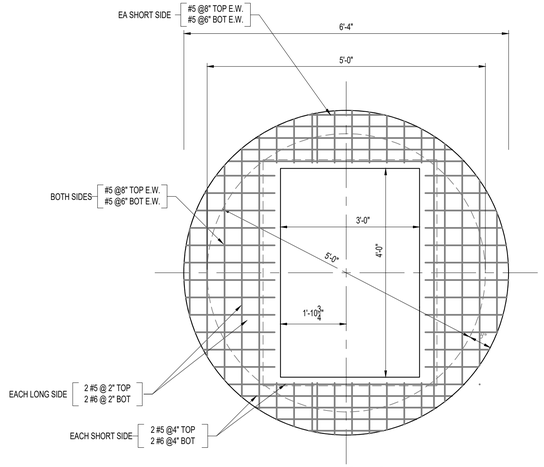
RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239
Rubel Siddique
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Date: 2023.05.25 10:33:37 -04'00'

RUBEL SIDDIQUE LICENSE No. 67239 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DATE:	09-05-2022
SHEET NO.	C-310

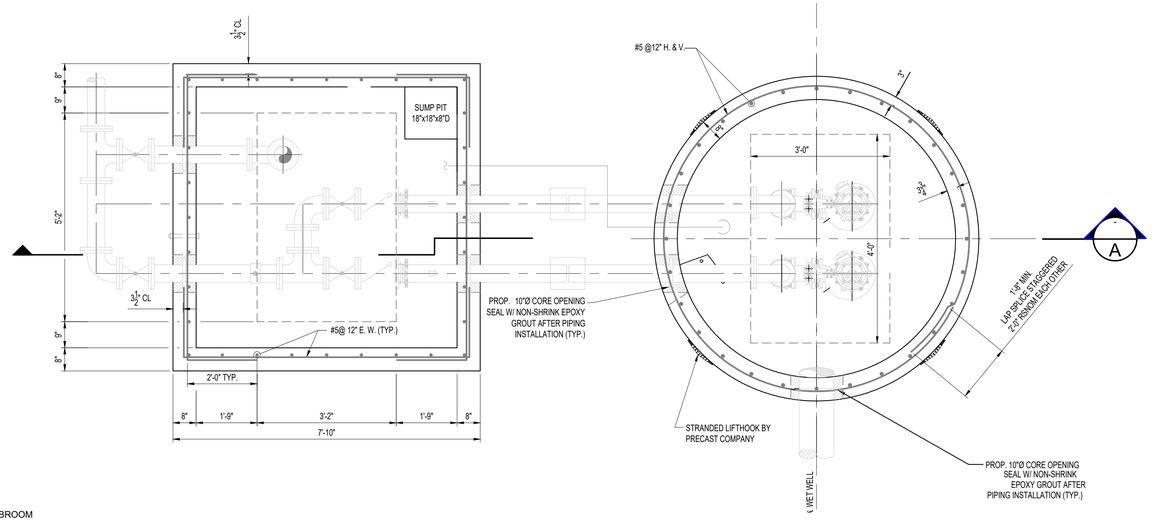


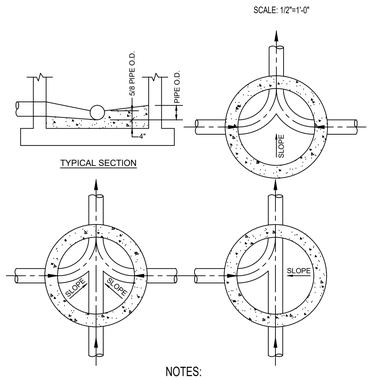
PLAN/VALVE PIT ACCESS



WET WELL TOP SLAB DETAIL

SCALE: 1/2"=1'-0"



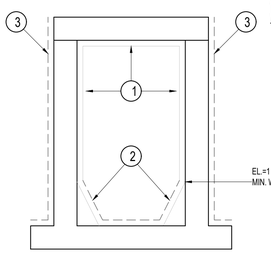


NOTES:

INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT
INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
CHANNELS TO BE FORMED IN ALL MANHOLES TO ACCEPT T.V. CAMERA.
WHEN DIRECTIONAL CHANNELS EXCEEDING 45° OCCUR, AN EXTRA FLOW
LINE ELEVATION DROP OF 0.05' ACROSS MANHOLE SHALL BE PROVIDED.

MANHOLE FLOW CHANNELS

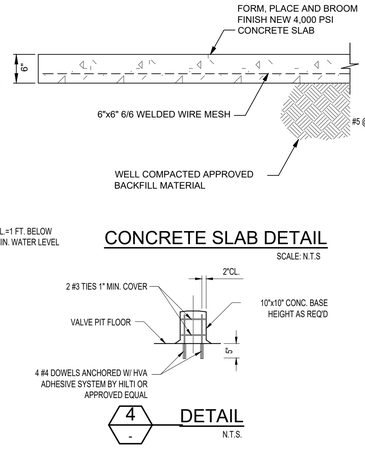
1 DETAIL N.T.S.



1 DETAIL N.T.S.

1 SEWPERCOAT (CALCIUM ALUMINATE CEMENT) OR P.P.C. COATING SYSTEM WW-200-/a/ DAMP CONCRETE OR APPROVED EQUAL

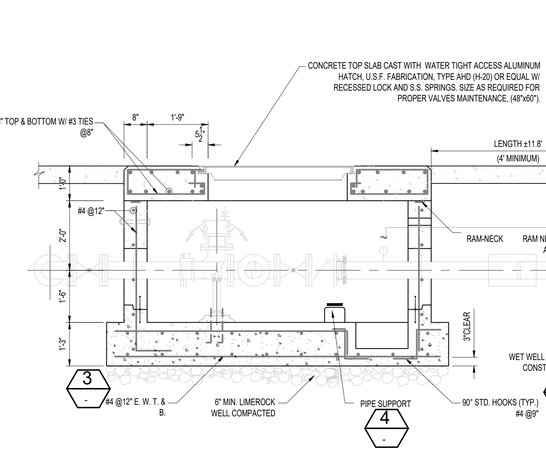
2 AND 3 KOP-COAT BITUMASTIC 300-M (COAL-TAR EPOXY).

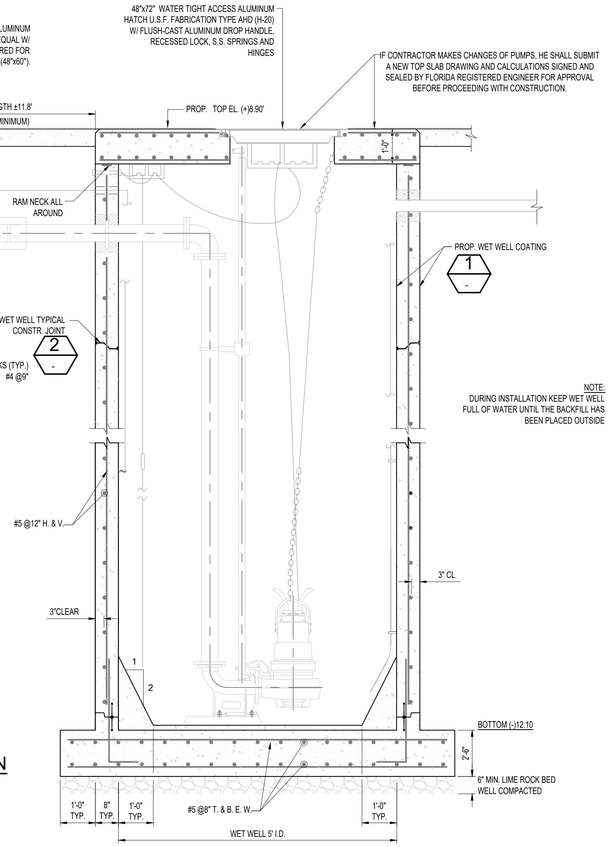


CONCRETE SLAB DETAIL

SCALE: N.T.S

4 DETAIL N.T.S.





A SECTION

SCALE: 1/2"=1'-0"

CONSTRUCTION NOTES:

1. THE STANDARD DRAWINGS PRESENTED ARE BASED ON MINIMUM OF 4" DISCHARGE FORCE MAIN.
2. CONTRACTOR SHALL VERIFY EXISTING UNDERGROUND UTILITIES IN APPLICATIONS, ELEVATIONS, AND QUALITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY EXISTING PIPING TO REMAIN BEFORE ORDERING NEW PIPE AND FITTINGS FOR CONNECTIONS. tHE CONTRACTOR SHALL INSPECT AND VERIFY ALL SITE CONDITIONS AND DIMENSIONS, AND COORDINATE WITH OTHER TRADES PRIOR TO CONSTRUCTION. WORK SHALL BE SCHEDULED ACCORDING TO SPECIFIED CONSTRUCTION SEQUENCE.
3. ATTENTION TO AVOID DISTURBING EXISTING ELECTRICAL SERVICE IN THE AREA UNDER CONSTRUCTION (FOR EXISTING FACILITIES ONLY).
4. ALL ELEVATIONS FOR UNDERGROUND UTILITIES SHOWN ARE T.O.P. ELEVATIONS UNLESS OTHERWISE SPECIFIED.
5. ALL PIPING, UNLESS SPECIFIED, TO USE DUCTILE IRON WITH LINING OF SEWER APPLICATION. FITTINGS AND CONNECTIONS UNDERGROUND TO USE MECHANICAL JOINT WITH RESTRAINTS; FITTINGS ABOVE GROUND OR IN VAULT TO USE FLANGE JOINT, OR MECHANICAL JOINT WITH RESTRAINTS
6. APPLY ALL UNDERGROUND FITTING WITH BOLT CONNECTIONS IN DIRECT CONTACT WITH SOIL WITH TWO COATS OF BITUMASTIC OR APPROVED EQUAL.
7. PROVIDE DIELECTRIC FITTINGS BETWEEN TWO DIFFERENT PIPING MATERIALS.
8. PIPE SUPPORTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
9. PROPOSED WET WELL SHALL BE CYLINDRICAL TYPE MADE OF REINFORCED CONCRETE WITH DEPTH NO GREATER THAN 24 FEET.
10. ALL PUMP CONTROLS SHALL BE SET AS PER DESIGN REQUIREMENTS.
11. ALL PIPING FOR OUTSIDE DROP TO BE DUCTILE IRON WITH LINING OF SEWER APPLICATION. FITTINGS AND CONNECTIONS UNDERGROUND TO USE MECHANICAL JOINT WITH RESTRAINTS.
12. PUMP STARTUP SHALL BE PERFORMED WITH NO EFFLUENT DISCHARGING INTO THE WET-WELL. PUMPS OPERATING POINTS CALCULATED BY PUMP REPRESENTATIVE DURING THE DRAWDOWN TEST SHALL BE NO GREATER THAN 10% OFF THE PUMP CURVE. PROPOSED PUMPS SHALL HANDLE BOTH MAX, MIN AND AVERAGE OPERATING POINTS GIVEN BY THE ENGINEER OF RECORD.
13. THREE PRESSURE GAUGES ARE TO BE INSTALLED INSIDE THE VALVE BOX, ONE GAUGE BEFORE EACH CHECK VALVE AND ONE PRESSURE GAUGE ON THE FORCEMAIN SIDE. PRESSURE DIAL READER SHALL NOT EXCEED 20 PSI.

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Airia Austin
Date: 2023.05.30
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NO.	REVISIONS	DATE	BY

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PROJECT NO.

202201002

CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

STRUCTURAL PLANS
AND DETAILS

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

Rubel Siddique
Digitally signed by Rubel Siddique
Date: 2023.05.25 10:33:57 -04'00'

RUBEL SIDDIQUE LICENSE No. 67239 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWN BY:	RS
CHECKED BY:	RS
DATE:	09-05-2022
SHEET NO.	C-311

ELECTRICAL GENERAL NOTES

I. GENERAL REQUIREMENTS

A. DRAWINGS. THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL OF THE MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL, AND SITE CONDITIONS SHALL GOVERN THE EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, CHECK DRAWINGS OF ALL TRADES TO VERIFY SPACES IN WHICH WORK WILL BE INSTALLED. WHERE HEADROOM OR SPACE CONDITIONS APPEAR INADEQUATE, CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE FIELD MODIFICATION IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF VARIOUS TRADES OR FOR PROPER EXECUTION OF THE WORK. SITE CONDITIONS SHALL GOVERN THE EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT, DEVICES, WIRING, CONDUIT, ETC.

ONE COMPLETE SET OF DRAWINGS AND SPECIFICATIONS SHALL BE KEPT ON FILE AT THE SITE FOR THE SOLE USE OF MARKING AS-BUILT DATA. ALL CHANGES SHALL BE MARKED IN RED ON THESE PRINTS AS WORK PROGRESSES.

PRIOR TO EACH REQUISITION FOR PAYMENT, AS-BUILT PRINTS SHALL BE BROUGHT UP TO DATE FOR ACCEPTANCE BY OWNER'S REPRESENTATIVE.

THE COMPLETED SET OF AS-BUILT PRINTS SHALL BE DELIVERED TO THE ARCHITECT/ENGINEER PRIOR TO FINAL PAYMENT FOR INCORPORATION ONTO ORIGINALS.

RISERS ARE DIAGRAMMATIC AND DON'T INTEND TO SHOW EVERY BEND REQUIRED FOR THE INSTALLATION.

B. COORDINATION. CONTRACTOR WILL BE REQUIRED TO FURNISH, INSTALL AND/OR CONNECT WITH APPROPRIATE SERVICES ALL ELECTRICAL ITEMS SHOWN ON ANY OF THE ARCHITECTURAL, PLUMBING, AIR CONDITIONING SPRINKLER, INTERIOR DESIGN AND ELECTRICAL DRAWINGS WITHOUT ADDITIONAL EXPENSE TO THE OWNER. IF DISCREPANCIES, CONFLICTS, INTERFERENCES OR OMISSIONS OCCUR BETWEEN DRAWINGS, NOTIFY IN WRITING THE ARCHITECT/ENGINEER IN AMPLE TIME TO PERMIT REVISIONS BEFORE THE BIDS ARE SUBMITTED.

ELECTRICAL CONTRACTOR SHALL COORDINATE THE REQUIREMENTS OF PLUG AND CHORD TYPE EQUIPMENT WITH MANUFACTURER AND IS REQUIRED TO PROVIDE ELECTRICAL OUTLETS THAT WILL ACCEPT MANUFACTURER'S SUPPLIED PLUGS.

SEE MECHANICAL DRAWINGS FOR ELECTRICAL REQUIREMENTS AND LOCATION OF A/C UNITS AND ALL OTHER MECHANICAL EQUIPMENT (SOLENOIDS, VAV'S, THERMOSTATS, PUMPS, FANS, SMOKE DETECTORS, DUCT HEATERS, ETC.) THE CONTRACTOR SHALL PROVIDE ALL BRANCH CIRCUIT AND CONTROL WIRING AS INDICATED OR REQUIRED AND IN CONFORMANCE WITH N.E.C. ARTICLE 440 AND MANUFACTURER'S RECOMMENDATIONS. ALL PENETRATIONS SHALL BE MADE WEATHERPROOF DURING CONSTRUCTION AND AFTER FINAL INSTALLATION. A/C EQUIPMENT WIRING, BREAKERS, AND FUSES ARE BASED ON A/C EQUIPMENT SPECIFIED ON CONTRACT DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL WIRING, AND OVERCURRENT PROTECTION REQUIREMENTS IF EQUIPMENT USED IS DIFFERENT FROM THAT SPECIFIED. CONTRACTOR SHALL MAKE THESE CHANGES AT NO ADDITIONAL COST TO THE OWNER.

C. TEMPORARY SERVICE TEMPORARY ELECTRICAL POWER AND LIGHTING SHALL BE FURNISHED, INSTALLED AND MAINTAINED FOR ALL TRADES REQUIRING SAME. SYSTEM SHALL CONSIST OF DISTRIBUTION SYSTEM, PANELBOARDS, GROUNDING, BRANCH CIRCUITS, SWITCHES, RECEPTACLES, OUTLETS. SERVICE SHALL BE ARRANGED FOR WITH POWER COMPANY, IF REQUIRED.

D. PERMITS. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, STATE SALES TAX, FEDERAL EXCISE TAX, ROYALTIES AND OTHER TAXES OR FEES AS REQUIRED FOR INSTALLATION OF A COMPLETE SYSTEM AS OUTLINED HEREIN AND AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL SECURE ALL NECESSARY LICENSES AND INSURANCE.

E. BASIS FOR BIDS EQUIPMENT SPECIFIED SHALL BE ADHERED TO. HOWEVER, OWNER HAS FINAL DECISION ON THE TYPE AND QUALITY OF EQUIPMENT TO BE SUPPLIED.

WITHIN 30-DAYS AFTER THE CONTRACT HAS BEEN EXECUTED, A FORMAL REQUEST FOR THE SUBSTITUTION OF PRODUCTS IN PLACE OF THOSE SPECIFIED WILL BE CONSIDERED, UNDER THE FOLLOWING CONDITIONS:

THE REQUEST IS ACCOMPANIED BY COMPLETE DATA ON THE PROPOSED SUBSTITUTION SUBSTANTIATING COMPLIANCE WITH THE CONTRACT DOCUMENTS INCLUDING PRODUCT IDENTIFICATION AND DESCRIPTION, PERFORMANCE AND TEST DATA, REFERENCES AND SAMPLES WHERE APPLICABLE, AND AN ITEMIZED COMPARISON OF THE PROPOSED SUBSTITUTION WITH THE PRODUCTS SPECIFIED, WITH DATA RELATING TO CONTRACT TIME SCHEDULE, DESIGN AND AESTHETIC EFFECT WHERE APPLICABLE.

THE REQUEST IS ACCOMPANIED BY ACCURATE COST DATA ON THE PROPOSED SUBSTITUTION IN COMPARISON WITH THE PRODUCT SPECIFIED, WHETHER OR NOT MODIFICATION OF THE CONTRACT SUM IS TO BE A CONSIDERATION. IF REDESIGN BY THE ARCHITECT OR HIS CONSULTANTS IS REQUIRED TO ACCOMMODATE AN ALTERNATE PRODUCT OR SYSTEM, ALL COSTS OF THIS REDESIGN SHALL BE BORNE BY THE CONTRACTOR REQUESTING THE CHANGE. IF ADDITIONAL WORK IS REQUIRED BY OTHER CONTRACTORS TO ACCOMMODATE AN ALTERNATE PRODUCT OR SYSTEM, ALL ADDITIONAL COSTS OF THIS WORK SHALL BE BORNE BY THE CONTRACTOR REQUESTING THE CHANGE.

THE REQUEST SHALL BE ACCEPTED OR REJECTED SOLELY AT THE DISCRETION OF THE OWNER WITH ARCHITECT'S OR ENGINEER'S WRITTEN APPROVAL.

F. CODES & STANDARDS THE WORK PERFORMED UNDER DIVISION 16 SHALL COMPLY WITH THE LATEST EDITION AND REQUIREMENTS OF THE FOLLOWING:

APPLICABLE LOCAL CODES AND ORDINANCES, NATIONAL ELECTRICAL CODE, AS AMENDED BY LOCAL CODE, ALL APPLICABLE FEDERAL AND STATE CODES, REGULATIONS AND STATUTES, APPLICABLE ENERGY CODE, OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA), UNDERWRITERS LABORATORIES, INC. (UL), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICANS WITH DISABILITIES ACT (ADA).

G. MATERIALS & EQUIPMENT MATERIAL AND EQUIPMENT SHALL BE NEW, STANDARD, CURRENT PRODUCTS OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH EQUIPMENT, AND SHALL BE THE MANUFACTURER'S LATEST DESIGN.

ALL MATERIALS SHALL BEAR THE LABEL OF THE UNDERWRITERS LABORATORY FOR THE INTENDED USE OR SHALL BE MATERIALS APPROVED BY THE CODE ENFORCING AUTHORITIES AND THE ARCHITECT.

FOLLOW THE INSTALLATION DIRECTIONS AND RECOMMENDATIONS OF MATERIAL AND EQUIPMENT MANUFACTURERS.

ALL WORK SHALL BE PERFORMED BY WORKERS SKILLED IN THEIR RESPECTIVE TRADES AND ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER.

INSTALL EQUIPMENT, INCLUDING SWITCHES, CONTROLLERS, FIXTURES AND TRANSFORMERS SUCH THAT REMOVAL OR REPLACEMENT MAY BE READILY ACCOMPLISHED WITHOUT DAMAGE TO EQUIPMENT OR FASTENERS.

IDENTIFY ALL EQUIPMENT, INCLUDING SAFETY SWITCHES, STARTERS, TRANSFORMERS, PANELS, TERMINAL BOXES, MOTORS, SPECIAL OUTLETS, RELAYS. IDENTIFICATION SHALL CORRESPOND TO THE TERMINOLOGY ON THE CONTRACT DOCUMENTS.

EXAMPLES:
1. AHU #1 STARTER
2. TRANSFORMER T-4
3. EMERGENCY STOP STATION
4. PANEL BC

H. SUPPORTING DEVICES DEVICES, INCLUDING ANCHORS, FASTENERS, HANGERS AND SUPPORTS, SHALL BE OF A TYPE DESIGNED OR FABRICATED FOR THE PURPOSE, AND SHALL ADEQUATELY AND SAFELY SECURE THE MATERIAL AND EQUIPMENT AND PRESENT A NEAT APPEARANCE. USE DEVICES WITH CORROSION RESISTANT CHARACTERISTICS FOR THE ATMOSPHERIC CONDITIONS IN WHICH THEY ARE INSTALLED.

I. BACKBOARDS USE 3/4" THICK EXTERIOR GRADE PLYWOOD, FIRE RETARDANT TREATED, OF WIDTH AND HEIGHT REQUIRED. PLYWOOD SHALL BE NEW AND PAINTED ON ALL SIDES AND EDGES. PAINT BACK SIDE WITH ASPHALTUM WHEN MOUNTED ON MASONRY.

PROVIDE BACKBOARDS FOR ALL GROUP-MOUNTED ELECTRICAL EQUIPMENT, AND FOR COMMUNICATIONS SYSTEMS AS CALLED FOR ON PLANS.

J. RACEWAYS & BOXES ROUTING OF RACEWAYS, INTERCONNECTING OUTLETS AND HOME-RUNS IS UP TO THE ELECTRICAL CONTRACTOR, BUT AFTER COMPLETION OF THE INSTALLATION, HE SHALL SUBMIT TO THE ENGINEER AS-BUILT DRAWINGS OF HIS WORK FOR FUTURE RECORD. DEVICE BOXES SHALL BE INSTALLED FLUSH, CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE INDICATED. ALL CONDUCTORS SHALL BE IN CONDUIT. FOR UNDERGROUND/IN-SLAB LOCATIONS USE GALVANIZED RIGID STEEL (GRS) CONDUIT OR SCHEDULE 40 PVC CONDUIT WITH GROUND WIRE SIZED AS INDICATED OR REQUIRED BY N.E.C., STUB-UPS FROM UNDERGROUND/IN-SLAB PVC CONDUIT SHALL BE GRS. UNDERGROUND GRS SHALL BE COATED WITH TWO COATS OF BITUMASTIC #50 APPLIED WITHOUT THINNING. ALL SECTIONS OF METALLIC CONDUIT SYSTEM SHALL BE GROUNDED AND ELECTRICALLY CONTINUOUS. USE ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR CONCEALED WIRING AND ELSEWHERE AS PERMITTED BY THE N.E.C. USE FLEXIBLE METAL CONDUIT FOR FLEXIBLE CONNECTIONS IN ALL WET LOCATIONS. INSTALL A NYLON PULL-CORD IN ALL EMPTY RACEWAYS FOR FUTURE USE. SIZE ALL GUTTERS AND PULL-BOXES PER NEC 370 AND 374. ALL PULL AND JUNCTION BOXES SHALL REMAIN ACCESSIBLE AT ALL TIMES.

ALL JUNCTION BOXES SHALL HAVE THE TYPE OF SYSTEM AND VOLTAGE OF CONTAINED CONDUCTORS STENCILED ON THE OUTSIDE OF THE BOX COVER.

EXAMPLES:	POWER 120/208	SOUND
	POWER 277/480	CONTROL 120 V
	T.V.	FIRE ALARM

INSTALL EXPOSED CONDUIT PARALLEL WITH OR AT RIGHT ANGLES TO THE BUILDING LINES. CONDUIT IN CONCRETE MEMBERS AND SLABS SHALL BE LOCATED SO AS NOT TO AFFECT THEIR STRUCTURAL STRENGTH. CONCEAL ALL CONDUIT IN WALLS, ABOVE CEILINGS, IN OR UNDER SLABS OR IN FURRING, EXCEPT IN MECHANICAL AND ELECTRICAL ROOMS.

ROUTE RACEWAYS TO AVOID CONFLICTS WITH THE WORK OF OTHER TRADES.

ALUMINUM CONDUIT WILL NOT BE PERMITTED.
MINIMUM SIZE OUTLET BOX SHALL BE 4" SQUARE BY 1-1/2" DEEP UNLESS APPROVED OR INDICATED OTHERWISE.
USE CAST METAL OUTLET BOXES WITH GASKETED COVERS FOR ALL EXTERIOR AND FOR ALL DAMP LOCATIONS.

PROVIDE APPROVED FIRE STOPPING MATERIALS AT ALL CHASES TO PREVENT DRAFTS, AT PENETRATIONS INTO RATED SPACES, AND OTHER LOCATIONS AS REQUIRED BY CODES.

PROVIDE CABLE SUPPORTS IN ACCORDANCE WITH NEC ARTICLE 300.

PROVIDE EXPANSION FITTINGS IN CONDUIT RUNS CROSSING EXPANSION JOINTS IN THE STRUCTURE.

K. CONDUCTORS. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS ARE #12 IN 1/2" CONDUIT. ALL CONDUCTORS SHALL BE COPPER. ACCEPTABLE INSULATION TYPES ARE TW, THW, THHN, THWN, AND XHHW, WITH USES AS RESTRICTED BY THE NEC. AMPACITIES OF CONDUCTORS IS TO BE BASED ON ARTICLE 310 OF THE NEC WITH UL LIMITATIONS: 60 DEG. RATING FOR SIZES #14 THROUGH #1; 75 DEG. FOR #1/0 AND LARGER. CABLES 3/0 AND LARGER SHALL BE TERMINATED WITH PRESSURE CRIMP CONNECTORS.

FOR 20 AMP BRANCH CIRCUITS GREATER THAN 100 FT. IN LENGTH, ONE WAY, UP TO 200 FT. USE #10 WIRE; OVER 200 FT., USE #8 WIRE.
INCREASE CONDUIT SIZE AS REQUIRED FOR THE LARGER CONDUCTORS. THIS SUPERSEDES WIRE SIZES CALLED FOR ON THE DRAWINGS.

CONDUCTORS SIZE #10 AND SMALLER SHALL HAVE INSULATION COLORED FOR PHASES A, B, C, AND N RESPECTIVELY AS FOLLOWS FOR 3 PHASE SYSTEM:

120/208 VOLTS: BLACK, RED, BLUE AND WHITE
120/240 VOLTS: BLACK, ORANGE (HIGH), BLUE AND WHITE
277/480 VOLTS: BROWN, ORANGE, YELLOW AND GRAY

ALL CONDUCTORS OF THE SAME PHASE IN PARALLELED FEEDERS OR SERVICES SHALL BE SOLIDLY CONNECTED TOGETHER AT THEIR TERMINATION IN A WIREWAY OR SPLICE BOX. MAKE CONDUCTOR LENGTH FOR PARALLEL FEEDERS IDENTICAL.

THE PHASE DESIGNATION OF ALL SECONDARY CONDUCTORS SHALL BE THE SAME AND SHALL BE INDICATED IN OR ON ALL 3 PHASE OUTLETS, TRANSFORMERS, PANELBOARDS, AND DISCONNECT SWITCHES, AND THEY SHALL BE CONNECTED WITH UNIFORM PHASE SEQUENCE.

MAINTAIN A, B, C PHASE RELATION LEFT TO RIGHT WHEN VIEWED FROM THE FRONT.

TAG ALL FEEDER CONDUCTORS AND IDENTIFY MAJOR CONDUITS IN OR AT WIREWAYS, PANELS, PULL BOXES, SWITCHBOARDS, MOTOR CONTROLLERS, CABINETS AND SIMILAR ITEMS TO ASSIST IN FUTURE CIRCUIT TRACING. CONDUCTOR TAGS SHALL BE NONCONDUCTIVE. IDENTIFICATION SHALL CORRESPOND TO THE CONTRACT DOCUMENTS.

COMMUNICATIONS, DATA, AND/OR WIRING WHICH IS NOT INSTALLED IN CONDUIT, AND WHICH IS ROUTED THROUGH ENVIRONMENTAL AIR SPACES, SHALL COMPLY WITH THE REQUIREMENTS OF NEC 300-22. PROVIDE TRAPEZE HANGER ASSEMBLY FOR PLENUM CABLES USING 3/8" DIAMETER HANGER ROD AND CHANNEL ASSEMBLY TO SUPPORT CABLE BUNDLES EVERY 4 FEET. ALL BUNDLES SHALL BE PROPERLY STRAPPED WITH SELF-LOCKING CABLE TIES. EXPOSED CABLES SHALL NOT LIE ON TOP OF CEILING TILES OR LUMINARIES.

L. GROUNDING. END-TO-END LIGHTING FIXTURES SHALL BE CONTINUOUSLY BONDED.

GROUNDING CONTACTS OF RECEPTACLES SHALL BE CONNECTED TO A SOLIDLY GROUNDED CONDUIT SYSTEM OR TO A SYSTEM GROUNDING CONDUCTOR (NOT THE SYSTEM NEUTRAL) BY A STRANDED COPPER WIRE NOT SMALLER THAN #12 AWG OR SHALL BE GROUNDED IN SOME OTHER APPROVED MANNER; THE RESISTANCE BETWEEN THE CONTACTS AND SERVICE GROUND SHALL NOT EXCEED 3 OHMS.

ALL CIRCUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR.

M. SAFETY SWITCHES/CIRCUIT BREAKER DISCONNECTS. SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE KD, FUSIBLE, OR NON-FUSIBLE, WITH POLES, AMPERE, VOLTAGE AND HORSEPOWER RATINGS INDICATED AND SHALL HAVE SOLID NEUTRALS. LUGS SHALL BE U.L. LISTED FOR COPPER-ALUMINUM.

ENCLOSURES FOR SAFETY SWITCHES SHALL BE NEMA-1, GENERAL PURPOSE, EXCEPT THAT SWITCHES INDICATED (WP) WEATHERPROOF, SHALL BE NEMA-3R ENCLOSURES WITH SUITABLE GASKETS AND BONDING MEANS.

SWITCHES AND DISCONNECT SHALL BE AS MANUFACTURED BY SQUARE "D", OR APPROVED EQUAL.

CIRCUIT BREAKER DISCONNECTS MAY BE USED IN LIEU OF SAFETY SWITCHES PROVIDING THEY COMPLY WITH THE SAFETY SWITCH REQUIREMENTS AND ARE SUPPLIED WITHIN THEIR RATINGS AND A SCHEDULE IS SUBMITTED FOR APPROVAL.

P. MOLDED CASE CIRCUIT BREAKERS. CIRCUIT BREAKERS SHALL CONFORM TO APPLICABLE FEDERAL SPECIFICATIONS AND NEMA STANDARDS. CIRCUIT BREAKERS SHALL BE OF THE AMPERE RATING, VOLTAGE RATING, NUMBER OF POLES AND CLASS OR INTERRUPTING CAPACITY (I.C.) AS INDICATED. INTERRUPTING RATINGS ARE GIVEN IN ROOT MEAN SQUARE (RMS), SYMMETRICAL AMPERES BASED ON NEMA TEST PROCEDURES. LUGS AND TERMINALS SHALL BE U.L. APPROVED FOR COPPER-ALUMINUM. ACCESSORIES SHALL BE 120 VOLT. A.I.C. OF BREAKER TO BE INSTALLED ON EXIST. PANELS SHALL MATCH EXIST.

EACH CIRCUIT BREAKER SHALL HAVE A TRIP UNIT FOR EACH POLE WITH ELEMENTS PROVIDING INVERSE TIME DELAY UNDER OVERLOAD CONDITIONS AND INSTANTANEOUS MAGNETIC TRIP FOR SHORT CIRCUIT PROTECTION UNLESS INDICATED AS NON-AUTOMATIC. TRIP ELEMENTS SHALL OPERATE A COMMON TRIP BAR TO OPEN ALL ELEMENTS. BREAKERS USED FOR SWITCHING SHALL BE RATED FOR SWITCHING DUTY.

O. FUSES. FUSES SHALL CONFORM TO NEMA AND U.L. AND SHALL BE OF THE VOLTAGE, CLASS AND AMPERE RATING INDICATED.

FUSES FOR MAIN DISCONNECT DEVICES SHALL BE HIGH INTERRUPTING CAPACITY, TIME DELAY, OR TYPE SUITABLE FOR DEVICE. PROVIDE ONE SPARE SET MOUNTED INSIDE THE CUBICLE, FOR EACH MAIN DEVICE.

FUSES FOR MOTORS AND ENCLOSED SWITCHES, NEMA CLASS K-5, UNLESS INDICATED OTHERWISE, DUAL ELEMENT, TIME DELAY. BUSSMAN - FUSETRON, FRN AND FRS, OR EQUAL.

OTHER FUSES SHALL BE AS INDICATED.

P. WIRING DEVICES. DEVICES SHALL BE AS SPECIFIED IN CONTRACT DOCUMENTS.

INSTALL PLATES AND COVERS ON ALL OUTLETS. INSTALL ALL DEVICES UNIFORMLY IN EACH AREA.

PLATES SHALL BE ALIGNED VERTICALLY AND HORIZONTALLY AND ALL EDGES SHALL BE IN FIRM CONTACT WITH SURROUNDING WALL FINISH.

MOUNTING HEIGHTS (TO CENTER LINE OF BOX):

GENERALLY MOUNT RECEPTACLES 18" AFF (ABOVE FINISHED FLOOR) UNLESS NOTED OTHERWISE.
MOUNT SWITCHES AND DIMMERS AT 48" AFF.
MOUNT OUTLETS OVER MIRRORS 8" HIGHER THAN MIRROR.
MOUNT OUTLETS OVER COUNTERS AND CENTERED IN THE BACK SPLASH WHERE IT OCCURS; RECEPTACLE SHALL BE HORIZONTAL.

ADJUST OUTLET HEIGHTS IN CERAMIC TILE WALLS TO BE ENTIRELY IN OR ENTIRELY OUT OF THE TILE. OUTLETS MAY BE HORIZONTAL TO MEET SPACE CONDITIONS.

TEST EACH SOCKET OF EACH OUTLET WITH A DEVICE INTENDED FOR THE PURPOSE.

ALL DEDICATED DATA EQUIPMENT BRANCH CIRCUITS SHALL FEED THIS TYPE OF EQUIPMENT ONLY AND SHALL CARRY A DEDICATED GROUNDING CONDUCTOR TO THE PANEL TO BE CONNECTED TO THE GROUNDING SYSTEM.

III DEMOLITION

REMOVE EXISTING RECEPTACLES, TELEPHONE, SWITCHES, AND ANY ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED. RELOCATE ANY OF THESE DEVICES AS INDICATED OR REQUIRED BY THE DRAWINGS. PROVIDE ARCHITECT WITH AS-BUILT DRAWINGS OF FINAL INSTALLATION FOR RECORD PURPOSES. CONTRACTOR IS NOTIFIED THAT NOT ALL EXISTING DEVICES MAY HAVE BEEN INDICATED ON THE DRAWINGS AND THAT SOME EXISTING ELECTRICAL DEVICES MAY NOT HAVE BEEN SHOWN IN THEIR ACTUAL LOCATION. CONTRACTOR IS REQUIRED TO VISIT SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO DETERMINING THE WORK THAT NEEDS TO BE ACCOMPLISHED AS PART OF HIS/HER BID.

THE WORK SHALL INCLUDE THE FURNISHING OF ALL MATERIALS, CUTTING, EXTENDING, CONNECTING, REPAIRING, ADAPTING, AND OTHER WORK COINCIDENTAL HERETO, TOGETHER WITH SUCH TEMPORARY INSTALLATIONS AS MAY BE NECESSARY TO SATISFY THE DEMOLITION PROGRAM. APPROVAL SHALL BE SECURED FROM THE LANDLORD/ARCHITECT PRIOR TO CUTTING/DRILLING ANY STRUCTURAL SUPPORT.

ALL BUILDING CONSTRUCTION AFFECTED BY THE REMOVAL, RELOCATION, INSTALLATION OF ANY PIECE OF EQUIPMENT SHALL BE REPAIRED AND FINISHED AS REQUIRED TO MATCH EXISTING CONDITIONS OR AS DIRECTED BY THE ARCHITECTURAL DRAWINGS, SPECIFICATIONS, OR OWNER'S REPRESENTATIVE.

WHEN ELECTRICAL DEVICES ARE INSTALLED IN PARTITIONS OR CEILINGS TO BE REMOVED, THE ELECTRICAL CONTRACTORTRACTOR SHALL DISCONNECT THEM UP TO THE NEXT OUTLET TO REMAIN OR BACK TO THE PANELBOARD, IF EXISTING TO REMAIN OUTLETS ARE FED THROUGH DEMOLISHED PARTITIONS OR CEILINGS, THE CIRCUIT SHALL BE REARRANGED TO MAINTAIN CIRCUIT CONTINUITY. WIRE SHALL BE REMOVED BACK TO SOURCE FROM INACCESSIBLE RACEWAYS NOT REUSED. INSTALL BLANK PLATES ON FLUSH OUTLETS NOT REUSED. PLATE COLOR SHALL MATCH ADJACENT SURFACE AS NEAR AS POSSIBLE IN FINISHED AREAS.

ALL ELECTRICAL EQUIPMENT SHALL BE REMOVED FROM STRUCTURE TO BE REMOVED. ACCESSIBLE RACEWAYS, WIRES, BOXES, SWITCHES, AND OTHER ELECTRICAL ITEMS ASSOCIATED WITH THIS WORK SHALL BE REMOVED IF NOT REQUIRED FOR NEW EQUIPMENT TO CONTINUE IN SERVICE.

ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS DIRECTED BY OWNER.

GENERAL ELECTRICAL NOTES

1. ALL ELECTRICAL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH NEC 2017, FBC 2020, LOCAL CODES AND ORDINANCES AND ALL STANDARDS OF CONSTRUCTION ESTABLISHED BY THE LANDLORD.
2. SUBMIT SHOP DRAWINGS FOR ACCEPTANCE BY THE ARCHITECT AND/OR ENGINEER BEFORE PROCEEDING WITH THE PURCHASE OR INSTALLATION OF THE EQUIPMENT AND MATERIALS. NO FACSIMILES OR FACSIMILE COPIES SHALL BE ACCEPTED.
3. ALL CONDUCTORS SHALL BE THW OR THWN COPPER. ALL EXPOSED CONDUITS SHALL BE RUN AS NEAT AS POSSIBLE. P.V.C. CONDUIT SHALL ONLY BE USED IN SLAB OR UNDERGROUND AT A MINIMUM DEPTH OF 24 INCHES.
4. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTION TO ALL VIBRATING EQUIPMENT SUCH AS MOTORS, ETC.
5. ALL ELECTRICAL EQUIPMENT SHALL BE APPROVED AS SAFE FOR USE IN THE U.S. WORKPLACE, AS PER A "NRTL" RECOGNIZED ORGANIZATION (U.L., C.S.A., ETC.)
6. ALL EQUIPMENT SHALL BE MOUNTED ABOVE FLOOD CRITERIA.
7. PRIOR TO BID, THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS. NOTIFY THE ARCHITECT OR ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL QUALIFY THE BID ACCORDINGLY.
8. THE DESIGNATED NUMBERS ARE SHOWN ON THESE PLANS AS PER THE ORIGINAL DOCUMENTS OR SITE INVESTIGATION FOR THE EXISTING CONDITIONS AND ARE FOR IDENTIFICATION ONLY. CONTRACTOR SHALL VERIFY AND SHOW THE CIRCUIT NUMBERS ACTUALLY USED IN THE INSTALLATION ON THE "AS-BUILT" DRAWINGS.
9. CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE OF DEFECT IN WORKMANSHIP AND MATERIALS FOR A PRIOR OF ONE YEAR AFTER ACCEPTANCE OF THE PROJECT.

ELECTRICAL NOTES:

1. ALL CONTRACTOR WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
2. CONTRACTOR SHALL SEAL OFF CONDUIT RUNS
3. CONTRACTOR TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT
4. CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
5. NEUTRAL TO BE SUPPLIED FOR 230V-3 PHASE POWER.

SYMBOLS LEGEND

- —G.F.I. RECEPTACLE 15 AMP/120 VOLT (TAMPER RESISTANT)
- J — JUNCTION BOX
- M — MOTOR

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PROJECT NO. 202201002

CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

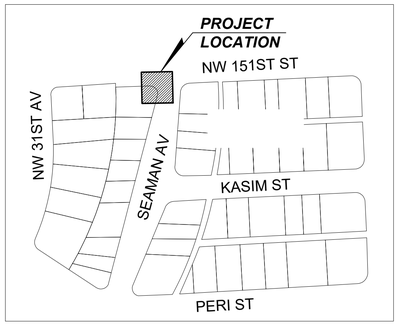
ELECTRICAL PLAN

RUBEL SIDDIQUE, P.E.
FL LICENSE NO. 67239

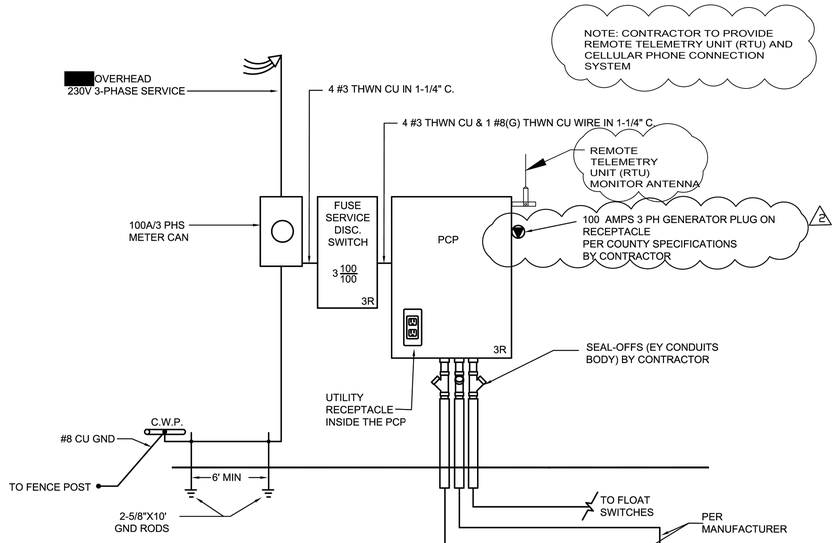
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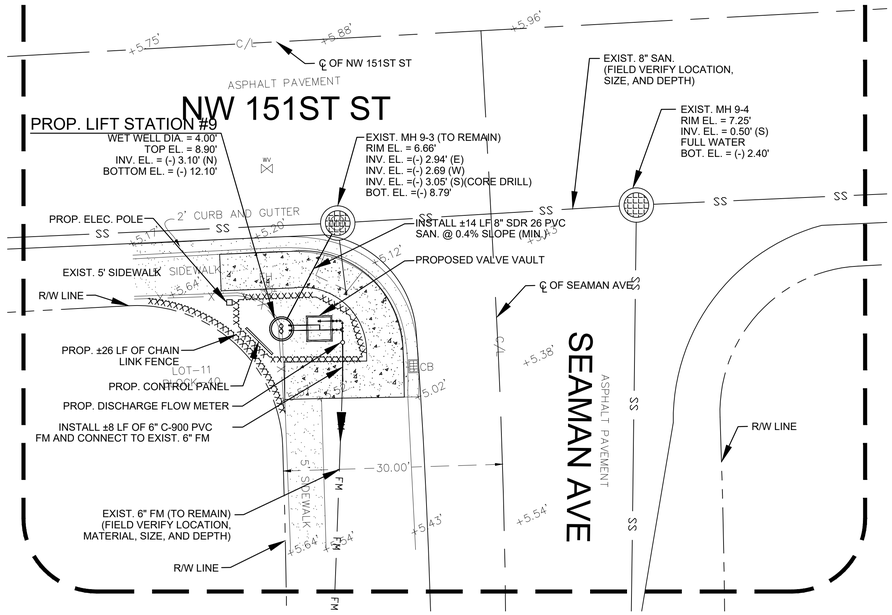
LOCATION MAP
N.T.S.



ELECTRICAL RISER DIAGRAM
N.T.S.

NOTES:

1. ENGINEER CALCULATED A FAULT CURRENT OF 5.50K AIC BASE ON CALCULATED FAULT CURRENT PROTEK RECOMMENDS 10K AIC. CONTRACTOR SHALL COORDINATE WITH FPL FOR ACTUAL FAULT CURRENT. EQUIPMENT INSTALLED SHALL WITHSTAND FPL'S AVAILABLE FAULT CURRENT. PRIOR TO ORDERING THE ELECTRICAL SWITCHGEAR THE CONTRACTOR SHALL OBTAIN FROM FPL A LETTER STATING THE AVAILABLE FAULT CURRENT. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
2. ALL EQUIPMENT TO BE MOUNTED ABOVE FLOOD CRITERIA.
3. COORDINATE NEW SERVICE REQUIREMENTS WITH FPL.



ELECTRICAL PLAN FOR LIFT STATION-9
1" = 10'

Assumed Fault Current Calculation

		kVA =	500		
		E =	240		
I = kVA x 1000 = trans. FLA / E x 1.732		trans. FLA =	1203		
Isca = trans. FLA x 100 / transformer Z		=	1203 / 5 %		
Isca = ampere short-circuit current RMS symmetrical.		Isca =	24,057 amperes		
Fault Current from	POINT TO POINT METHOD				
	Length (distance) FEET	L =	90	Three Phase 240/120	
	(ASC)	Isca =	24,057		
	# conductors per phase	N =	1	Copper in Nonmetallic Raceway	
'f' factor = 1.732 x L x I / N x C x E L-N	Phase conductor constant	C =	4,635	Phase Conductor	3
	Volt Line to Line	E L - L =	240	Volt	
		f =	3.371		
	Neutral conductor constant	C =	4,635	Neutral Conductor	3
	Volt Line to Neutral	E L - N =	120	Volt	
		f =	6.741		
Multiplier M = 1 / 1 + f	Line to Line	M =	0.229		
	Line to Neutral	M =	0.129		

Isca x M = fault current at terminals of main disconnect L- L = → 5,504 amperes
Isca x M = fault current at terminals of main disconnect L- N = → 3,108 amperes

LIFT STATION LOAD TABULATION

SERVICE VOLTAGE: 120/240V. Ø

DESCRIPTION	LOAD	AMPACITY
① SUBMERSIBLE WASTEWATER PUMPS	2 @ 5 HP	= 14.60 A
CPT + SPARE PROVISIONS	10KVA	= 24.04 A
CONNECTED LOAD		= 38.64 A
② SERVICE ENTRANCE =	38.64 A + (0.25)(7.3)	= 40.46 A

NOTES:
① AMPACITIES PER TABLE 430-150 OF THE NATIONAL ELECTRIC CODE.

② SERVICE ENTRANCE MINIMUM SIZE AS PER ARTICLE 230 OF THE NATIONAL ELECTRIC CODE.

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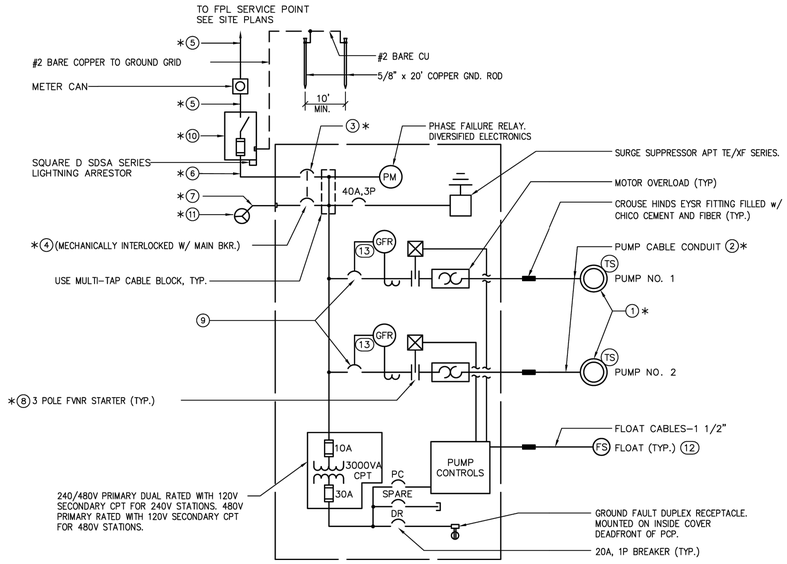
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LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

ELECTRICAL PLAN

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NOTES:

(12) REFER TO CONTROL DIAGRAMS FOR EXACT NUMBER OF FLOAT SWITCHES REQUIRED.

(13) MOTOR CIRCUIT PROTECTOR WITH ADJUSTABLE MAGNETIC TRIN AND GROUND FAULT PROTECTION EQUIPMENT. OPENS MOTOR CIRCUIT PROTECTOR ON GROUND FAULT. PROVIDE ADDITIONAL ALARM CONTACT FOR COMMON ALARM INDICATION. GROUND FAULT CENSOR TYPE GC BY SQUARE D OR APPROVED EQUAL.

TYPICAL PUMP CONTROL PANEL (PCP) SINGLE LINE DIAGRAM

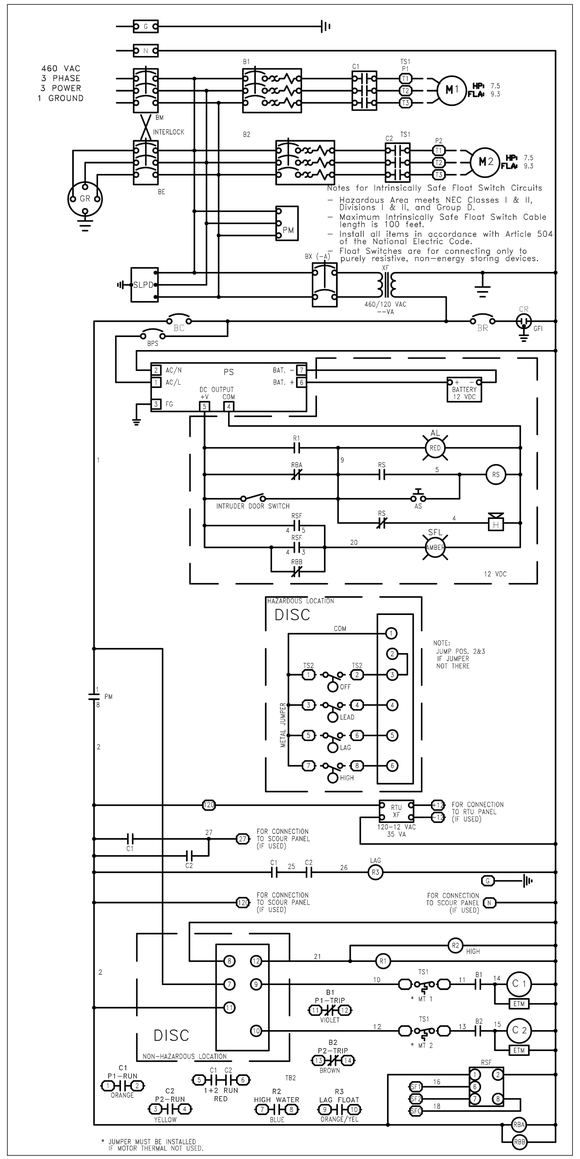
* ADDITIONAL REQUIREMENTS AND NUMERICAL DESIGNATIONS.

PCP CONTROL PANEL NOTES

CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR COMPLIANCE REVIEW AND APPROVAL BY OWNER / ENGINEER OF RECORD BEFORE INSTALLATION

			①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
STATION NUMBER	SERVICE VOLTAGE	EXISTING MOTOR SIZE (HP)	NEW MOTOR SIZE (HP)	PUMP CABLE CONDUIT SIZE	PANEL MAIN BKR	EMERGENCY MAIN BKR.	SERVICE CONDUIT CONDUCTORS	LOAD CONDUIT AND CONDUCTORS	EMERGENCY CONDUCTORS	STARTER SIZE	MOTOR BREAKER	FUSED SERVICE DISCONNECT SWITCH/FUSES	GENERATOR RECEPTACLE
15	120/240V, 3Φ, 4W	UNKNOW	2 @ 5	2"	100A,3P	100A,3P	4#2-1 1/2"	3#2 & 1#6GND-1 1/2"	3#2 & 1#6GND	1	50A,3P	100A,3P/ 100A	SUPPLIED BY CONTRACTOR

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DUPLEX CONTROL DIAGRAM

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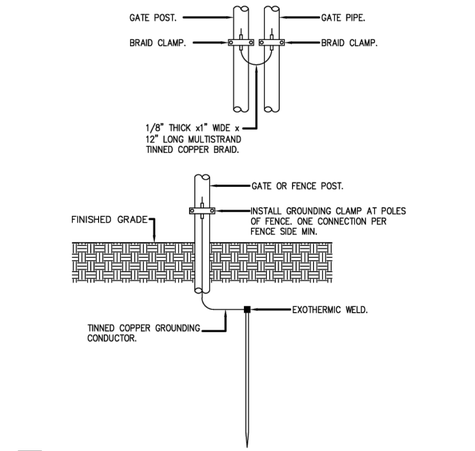
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ELECTRICAL PLAN

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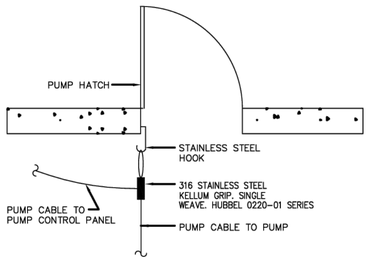
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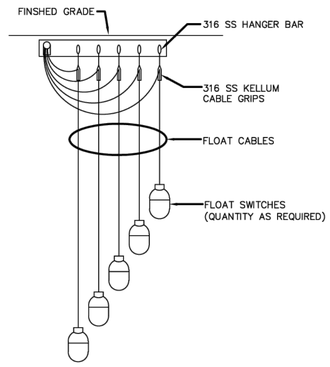
1 TYPICAL GATE OR FENCE POST GROUNDING

N.T.S.



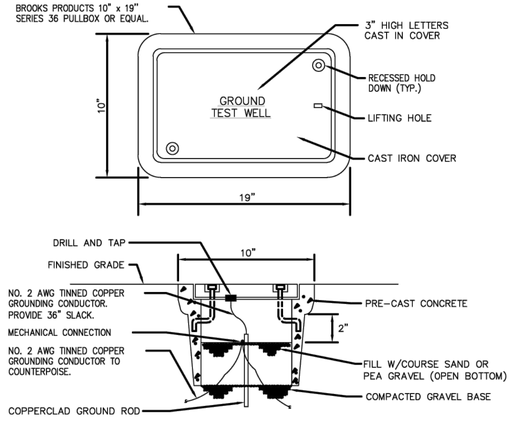
2 PUMP CABLE MOUNTING DETAIL

N.T.S.



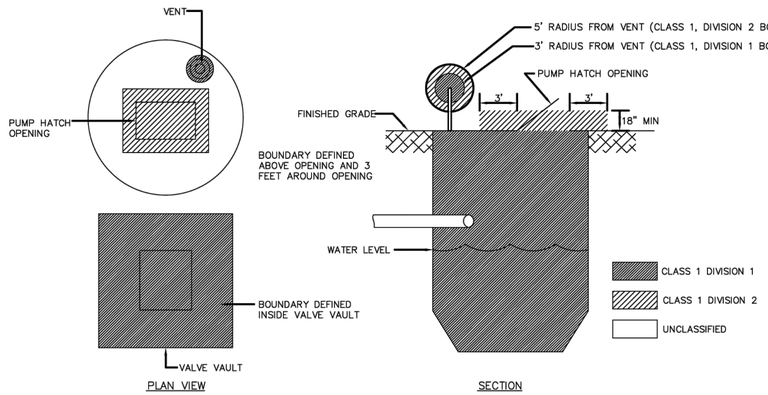
3 FLOAT SWITCH MOUNTING DETAIL

N.T.S.



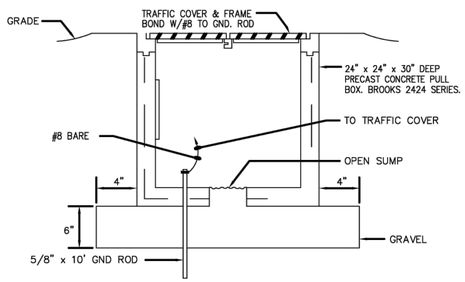
4 GROUND TEST WELL

N.T.S.



5 NFPA BOUNDARY CLASSIFICATION

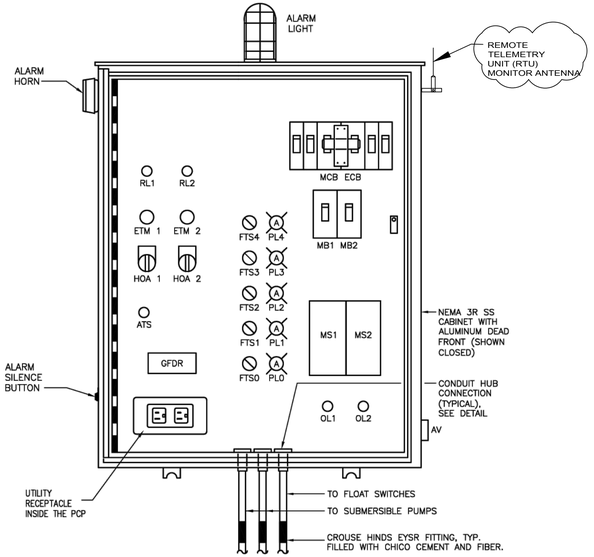
N.T.S.



6 PULL BOX DETAIL

N.T.S.

NOTE: CONTRACTOR TO PROVIDE REMOTE TELEMETRY UNIT (RTU) AND CELLULAR PHONE CONNECTION SYSTEM



NOTE: PANEL COVER NOT SHOWN

PUMP CONTROL PANEL FRONT VIEW

(TYPICAL FOR ALL LIFT STATIONS)

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PROJECT NO.

202201002

CITY OF OPA-LOCKA
LIFT STATION 9 REHABILITATION
OPA-LOCKA, FLORIDA
MIAMI-DADE FLORIDA

ELECTRICAL PLAN

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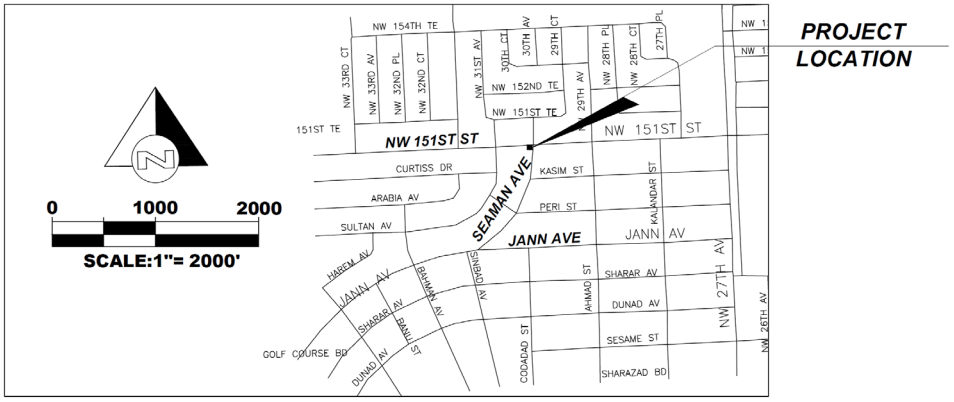
CITY OF OPA-LOCKA

"The Great City of Florida"

PROJECT SPECIFICATIONS

FOR

LIFT STATION 9 REHABILITATION



LOCATION MAP

PREPARED BY:

SSN ENGINEERING

DECEMBER, 2023

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 SCOPE OF WORK

A. This Section describes the project in general and provides an overview of the extent of the work to be performed under this Contract. Detailed requirements and extent of work is stated in the applicable Specification sections and shown on the Plans. The Contractor shall, except as otherwise specifically stated herein or in any applicable parts of the Contract Documents, provide and pay for all labor, materials, equipment, tools, construction equipment, and other facilities and services necessary for proper execution, testing, and completion of the work under this Contract.

1.02 CONSENT DECREE PROJECT

Not Applicable.

1.03 SPECIFICATIONS

A. The Specifications included in these Contract Documents establish the minimum performance and quality requirements for materials and equipment with the minimum standards for quality of the workmanship and appearance. Generally, there has been no attempt to separate the Specification sections into groups for the work of separate subcontractors, or for work to be performed by the various trades. Should there be any question as to the interpretation of any particular Specification section or part of Specification section, such question should be directed to the Department prior to the submittal of a proposal for the work under this Contract.

B. The work shown on the Plans is intended to be comprehensive and descriptive, not an exact and complete representation of the actual finished work. Installed work shall include fittings, joints, supports, nuts, bolts, and all other accessories required to provide complete and satisfactory systems as specified, even though some items may not be specifically shown on the Plans.

C. It is the intent of City to obtain a complete functional, satisfactory and legally operable installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein. The Contractor shall provide all materials for the project unless they are specifically called out in these specifications as being supplied by the Department. The Contractor shall also supply all other labor, material or equipment

required to preclude damage to or loss of functionality of any existing facility or system.

D. No request for additional compensation or Contract time (except for a non-compensable item extension at the sole discretion of the Engineer, whose decision shall be final) resulting from encountering utilities or structures not shown, or differing in location or elevation from that shown, will be considered. The Contractor shall explore sufficiently ahead of the Work to allow time for any necessary adjustments without delay to the progress of the installation. Cost due to delays occasioned by encountering utilities or structures which could have or should have been discovered by timely exploration ahead of the work shall rest solely with the Contractor.

1.04 REASONABLY IMPLIED PARTS OF THE WORK SHALL BE DONE THOUGH ABSENT FROM SPECIFICATIONS

A. Any part of the work which is not mentioned in the Specifications but is shown on the Plans, or any part not shown on the Plans but described in the Specifications, or any part not shown on the Plans nor described in the Specifications, but which is necessary or normally required as a part of such work, or is necessary or required to make each installation satisfactorily and legally operable, shall be performed by the Contractor as incidental work without extra cost to the City, as if fully described in the Specifications and shown on the Plans, and the expense thereof shall be included in the applicable unit prices or lump sum bid for the work.

1.05 DESCRIPTION OF WORK

A. The project consists of furnishing all materials, labor, and equipment necessary to Upgrade Sewage Pump Station No. 09, including, but not limited to, excavation, demolition and modification work including: Abandon existing dry well; Remove of dry well chimney; Remove of existing pumps, valves, piping, fittings, emergency discharge connection, existing sewer clean out plug, existing concrete slabs; existing wet well top slab; Remove and Replace in kind to match existing 6’(feet) chain link fence; Remove and Relocate as required: existing water meter and connect line to existing service; existing RTU antenna, existing electric box, existing concrete slab for electrical service; Relocate as required existing back flow preventer unit and water faucet, existing plug valve; furnish, installation, operation, and removal of temporary sewage effluent by-pass pumps, equipment and accessories; furnish and install wet well concrete top slab / new valve vault structure concrete and concrete top slab; furnish and install aluminum access hatches for wet well and valve vault and emergency connection; furnish and install new wet well protecting coating; furnish and install two (2) 2.68 HP submersible pumps and related equipment; furnish and install bubbler control system and related equipment; furnish and install new meter and main disconnect; furnish and install the proposed power/control system inclusive of the necessary electrical panel, enclosure, telemetry system and related equipment; install electrical conduits and junction boxes; install R.T.U. panel and S.C.A.D.A. equipment furnished by the Department; electrical work;

mechanical work: furnish all materials, equipment and supplies necessary for pump station startup and testing; furnish and install sewage force main pipe and fittings; connection to existing sewage force main; replacement of any sod, sidewalk, pavement damaged during construction; site restoration; and other appurtenant and miscellaneous items for a complete, satisfactory and functional installation.

B. Pumping Station No. 09 is located at SW Corner of NW 151st ST and Seman Ave in Section 21, Township 52, Range 41, Miami-Dade County, Florida.

C. It is the intent of the department to obtain a complete and working installation under this Project and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.06 TESTING

A. Testing procedures shall be submitted to the Engineer as Shop Drawings and will be subject to review and approval. The Department reserves the right to require test procedure and equipment changes and revisions to the extent considered appropriate by the Engineer whose decision shall be final. The Contractor is advised that all testing shall be carried out in accordance with the best practices of the trade, best management practices (bmp) and as recommended in writing by the engineering/technical/test staff of the manufacturer of the equipment and he should plan and price his test work accordingly. In no case will test recommendations of a manufacturer's sales or management groups be considered sufficient. All necessary temporary power sources, load banks, test materials, test instrumentation, qualified test personnel including manufacturer's representatives, fuels and lubricants shall be provided by the Contractor and shall be as approved by the Engineer and, if not approved, the Contractor shall change the item(s) to the satisfaction of the Engineer. Where required by the Engineer, testing shall be carried out utilizing Contractor-supplied power sources and load banks prior to any connection with FPL. The Contractor shall include in his prices bid all costs for testing and no extra compensation will be allowed.

B. Factory testing of equipment is in all cases required and test data from these tests shall be provided to the Engineer prior to shipment. The Department will decide when to send its personnel or representatives to the factory for witness testing of equipment. Travel expenses for Department personnel or representatives are paid for by the Department. Repeat tests due to unsuccessful tests will be borne by the Contractor. To establish a base line, the Bidder will assume that any piece of equipment with an invoice cost to the Contractor of one hundred thousand dollars ($100,000) or more will require witnessed testing. The City will in the Specifications try in all cases to note which items will require testing.

C. On site testing shall conform to the protocol previously approved by the Engineer, and shall include testing and calibration prior to energizing of individual cubicles followed by testing and calibration as a whole system or group of systems. The Contractor shall supply all material, equipment, power, time, and fully qualified

specialist personnel to perform all system integration work as necessary to provide systems that talk to one another and correctly react to one another, including systems that must communicate with, and react to existing systems, and systems being or to be installed by others. It is an absolute requirement that upon completion, all systems installed in the Work be able to correctly communicate and react to one another and to systems in existence, being or to be installed, external to the Work. Final testing and calibration will be performed with the equipment energized and will only take place when the Engineer is satisfied with the results of earlier tests. Full written reports of tests and results shall be furnished by the Contractor to the City. All costs for this testing, calibration, system integration and reporting, including the costs for factory and specialist personnel required during testing, calibration and system integration, shall be included in the prices bid and no extra compensation will be allowed. Any delays or costs occasioned by test procedures or results not being satisfactory to the Engineer shall rest solely with the Contractor and no extra time or compensation will be allowed. All on-site testing shall be witnessed by City, and the Contractor shall make timely arrangements and fully coordinate tests with the Engineer.

D. After installation is completed, the Contractor shall provide records of non-destructive electrical insulation tests performed by a certified institution approved by the Engineer, witnessed by the City personnel and attesting that the dielectric condition of the equipment and wiring is acceptable.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01011

SITE CONDITIONS

PART 1 GENERAL

1.01 SITE INVESTIGATION AND REPRESENTATION

A. The Contractor acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation; disposal, handling and storage of materials; availability of labor, water, electric power, roads; disposal of water from construction; uncertainties of weather; the conformation and conditions at the ground; the type of equipment and facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this Contract.

B. The Contractor further acknowledges that he has satisfied himself as to the character, quality, and quantity of surface and subsurface materials to be encountered from inspecting the site and from evaluating information derived from exploratory work that may have been done by the City or included with these Contract Documents. Any failure by the Contractor to acquaint himself with all the available information will not relieve him from responsibility for properly estimating the difficulty or cost thereof under this Contract.

C. The Contractor acknowledges that by personal field observation or other means satisfactory to himself, performed prior to the bid, he has included in the prices bid all costs for dealing with all construction problems created by observable above or on grade features on or adjacent to the site of the work whether these features are shown on the Plans or described in the Specifications. In instances where the observable features indicate subsurface conditions which may affect the Project work, as for example, a pavement patch or catch basin gratings indicating respectively a utility or storm sewer not shown on the Plans, the Contractor acknowledges that he has made timely, diligent, inquiry of the Engineer or by other means fully satisfied himself prior to the bid as to the nature of, and costs created by, the subsurface condition and included all costs therefore in the prices bid.

1.02 INFORMATION ON SITE CONDITIONS

A. All information obtained by City regarding the site conditions, topography, subsurface information, ground water elevations, existing construction of site facilities as applicable, and similar data will be made available to the Contractor in the Contract Documents. Such information is offered as supplementary information only. Neither the Engineer nor MDWASD assumes any responsibility for the completeness or for the Contractor's interpretation of such supplementary information. Prior to bidding and after written approval from MDWASD, bidder

may make his own survey investigations to satisfy himself with site conditions at his own cost.

B. Subsurface investigations, including test borings, have been made to indicate subsurface conditions at locations in the Project.

C. Prospective bidders are advised, at their own expense, to make such subsurface investigation, by boring or test hole excavation, as may be desirable. However, such work is to be scheduled by appointment with the Engineer if on a City site or by notification to the City and properly permitted if in the public right of way.

1.03 DIFFERING SUBSURFACE CONDITIONS

A. In the event subsurface or latent physical conditions are found materially different from those indicated in these Documents, and differing materially from those ordinarily encountered and generally recognized as inherent in the character of work covered in these Contract Documents, promptly, and before such conditions are disturbed, notify the Engineer in writing of such changed conditions.

B. The Engineer will investigate such conditions promptly and following this investigation, the Contractor shall proceed with the work, unless otherwise instructed by the Engineer. If the Engineer finds that such conditions do so materially differ as to cause an increase or decrease in cost and time considered reasonable by the Engineer, the City will make the final decision regarding any adjustment in cost or time for completion.

C. In the event that site conditions differ from those expected by the Contractor, the Contractor shall proceed to complete the work as contemplated by the Plans and Specifications at his own cost and expense. If in the discretion of the Engineer, the difference in site conditions renders completion of the work as described by the Plans and Specifications impossible, the Engineer may alter the work, whereupon the Contractor shall be compensated for any extra work in accordance with Section 13 "Extra Work and Payment Therefore" of the General Covenants and Conditions; the Engineer shall not alter the work where the site conditions render the work more difficult or costly to perform, if such work is otherwise still possible as described in the Contract Documents.

1.04 EXISTING UTILITIES AND LOCATION SERVICES

A. Known utilities and structures adjacent to or encountered in the work are shown on the Plans. The locations shown are taken from existing records and the best information available from existing plans. However, it is expected that there may be some discrepancies and omissions in the locations and quantities of utilities and structures shown. Those shown are for the convenience of the Contractor only, and no responsibility is assumed by either MDWASD or the Engineer for their accuracy or completeness. **No request for additional compensation or**

Contract time (except for a non-compensable time extension at the sole discretion of the Engineer, whose decision shall be final) resulting from encountering utilities or structures not shown, or differing in location or elevation from that shown, will be considered. The Contractor shall explore sufficiently ahead of the work to allow time for any necessary adjustments without delay to the progress of the installation. Costs due to delays occasioned by encountering underground utilities or structures which could have or should have been discovered by timely exploration ahead of the Work shall rest solely with the Contractor.

B. Prior to proceeding with excavation the Contractor shall contact all utility companies and all other users of the right-of-way in the area to aid in locating their underground services. It shall be the Contractor's responsibility to contact utility companies at least three Normal Working Days before starting construction. The Contractor shall proceed with caution in the excavation and preparation so that the exact location of underground utilities may be determined. The Contractor shall comply with Chapter 556, F.S. "Underground Facility Damage Prevention and Safety Act", Chapter 553, F.S. "Florida Trench Safety Act, Part IV", Chapter 368, F.S., "Florida Gas Safety Law, Part 1, and OSHA Standard 1926.651.

C. It is the responsibility of the Contractor to ensure that all utility or other existing facilities, the stability of which may be endangered by the close proximity of excavation, are temporarily held in position while work proceeds in the vicinity of the facilities and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.

D. The Contractor shall take all reasonable precautions against damage to existing utilities. However, in the event of a break in an existing water main, gas main, sewer or underground cable, the Contractor shall immediately notify the responsible official of the organization operating the interrupted utility. The Contractor shall lend all possible assistance in restoring services and shall assume all cost, charges, or claims connected with the interruption and repair of such services, as determined by the Department.

1.07 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

A. Where the Contractor's operation could cause damage or inconvenience to railway, telephone, fiber optic, television, electrical power, oil, gas, water, sewer, irrigation system, or any other utility, the Contractor shall make all arrangements necessary for the protection of these utilities and services.

B. Notify all utility companies that are affected by the construction operation at least 48 hours in advance. Under no circumstance expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities and utility poles where necessary. **Absolutely no extra compensation will be allowed for construction problems created by utility**

poles of whatever size, overhead electric, telephone or other lines, whether shown on the Plans or not. The Contractor is solely responsible for discerning such items in the field prior to bidding and including all costs for such work in the prices bid.

C. The Contractor and his subcontractors shall be solely and directly responsible to the owners and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.

D. Neither the City nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.

E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no event shall interruption of any utility service be allowed unless granted by the owner of the utility. In the event water service lines that interfere with trenching are encountered, the Contractor may, by obtaining prior approval of the water utility, cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense and as approved by the Engineer.

G. Replace, with material approved by the Engineer, at Contractor's expense, any and all other laterals, existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents and as approved by the Engineer.

1.08 INTERFERING STRUCTURES

A. Take necessary precautions to prevent damage to existing structures whether on the surface, above ground, or underground. An attempt has been made to show major structures on the Plans. While the information has been compiled from the best available sources, its completeness and accuracy cannot be guaranteed, and is presented as a guide. The Contractor is solely responsible for field verification of all locations.

1.9 FIELD RELOCATION

A. During the process of construction, it is expected that minor relocations of the work may be necessary. Such relocations shall be made only by the direction of the Engineer at the Contractor’s expense. If existing structures are encountered that will prevent construction as shown, notify the Engineer before continuing with the work in order that the Engineer may make such field revisions as necessary to avoid conflict with the existing structures. If the Contractor fails to notify the

Engineer when an existing structure is encountered, and shall proceed with the work despite this interference, the Contractor does so at his own risk.

B. Representatives of utility companies, the railroad companies, the traffic and transportation authorities, etc., shall be notified in accordance with the provisions set forth in the relevant sections of the Specifications and the permitting documents.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01016

SAFETY REQUIREMENTS AND PROTECTION OF PROPERTY

PART 1 GENERAL

1.01 CONTRACTOR'S RESPONSIBILITY FOR SAFETY

A. Conduct whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees) and property during the Contract period. This requirement shall apply continuously and not be limited to normal working hours.

B. Neither the Professional activities of the Design Professional, nor the presence of the Design Professional nor his or her employees and subconsultants at a construction site, shall relieve the Contractor and any other entity of their obligations, duties and responsibilities including but not limited to, construction means, methods, sequence techniques or procedures necessary for performing, superintending, or coordinating all portions of the Work of construction in accordance with the Project Documents and any health and safety precautions required by any regulatory agencies.

1.02 MANDATORY SAFETY TRAINING AT WATER AND SEWER TREATMENT PLANTS

A. The Contractor shall coordinate with the Construction Manager and thereafter the Water and Sewer Department Safety Office to arrange for a mandatory (PSM) Project Safety Management training for all his personnel who will be on site. This training must be completed prior to mobilization or any other work on site. The Contractor shall also be responsible that all on-site personnel of his subcontractors, at whatever tier, receive this training. The training normally takes about 2 to 3 hours and is held at the project site.

1.03 FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS

A. Safety provisions shall conform to the Federal and State Departments of Labor Occupational Safety and Health Act (OSHA), and all other applicable Federal, State, County, and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of these Project Documents. Where any of these are in conflict, the more stringent requirements shall be followed. Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.

B. All open excavations made in the earth shall be performed in compliance with the State of Florida Trench Safety Act, OSHA 29 CFR 1926 Subpart P (Chapter 90-96, Laws of Florida). The Contractor shall appoint a "competent person", in

accordance with Subpart P, who shall be present at the jobsite. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

C. The Contractor shall familiarize himself with the "Underground Facility Damage Prevention and Safety Act", Florida Statute 556. The Contractor shall contact the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via www.sunshine811.com) at least forty-eight hours prior to any excavation. Failure to familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.

D. Conduct operations in such a manner utilizing warning devices, such as traffic cones, barricades and warning lights that traffic, pedestrian and Department personnel are given adequate warning of hazards of the worksite as may be deemed necessary by the Department, Engineer of Record, and governing agency having jurisdiction over the work or political subdivision.

E. The Contractor shall be in compliance with all applicable provisions of the OSHA Code of Federal Regulations (CFR), including, but not limited to, the following:
   1. Process Safety Management (29 CFR 1910.119)
   2. Personal Protective Equipment (29 CFR 1910.132)
   3. Respiratory Protection (29 CFR 1910.134)
   4. Confined Space Entry Procedures (29 CFR 1910.146)
   5. Lockout/Tagout (29 CFR 1910.147)
   6. Industrial Truck / Forklift (29 CFR 1910.178)
   7. Electrical Safety (29 CFR 1910.301)
   8. Commercial Diving (29 CFR 1910.401)
   9. Air Monitoring (29 CFR 1910.1000)
   10. Asbestos & Lead Abatement (29 CFR 1910.1001, 1025)
   11. Blood Borne Pathogens (29 CFR 1910.1030)
   12. Crane Operations (29 CFR 1926 & ANSI)
   13. Fall Prevention Protection (29 CFR 1926.104)
   14. Welding and Cutting (29 CFR 1926.350)
   15. Scaffolding (29 CFR 1926.451)
   16. Excavation Protection (29 CFR 1926.650)
   17. Movement of Traffic (FDOT Index)

1.04 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

A. The Contractor shall at all times provide proper facilities for safe access to the Work by authorized government officials.

1.05 CONSTRUCTION SAFETY PROGRAM

A. Develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor's Manual of Safety Practices outlining the firms policies on field safety procedures for employees shall be submitted to the Engineer for review before "Notice to Proceed" will be issued. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.

B. Certain products specified in these specifications contain warnings by the manufacturers that under certain conditions, if instructions for use are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.

C. The duty of the Engineer to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's Safety Supervisor, the safety program, or any safety measures taken in, on, or near the construction site.

1.06 SAFETY EQUIPMENT

A. As part of the safety program, maintain at an office or other well-known place at the jobsite, safety equipment applicable to the Work as prescribed by the governing safety authorities, all articles necessary for giving first-aid to the injured, and establish the procedure for the immediate relocation to a hospital or a doctor's care of any person who may be injured on the jobsite.

B. Perform all necessary work to protect all personnel and the general public from hazards, including, but not limited to, surface irregularities or unramped grade changes, and trenches or excavations. Furnish barricades, lanterns, and proper signs to safeguard all persons and work.

C. The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, shoring, logging, machinery guards and the like, shall be in accordance with the applicable governing safety authorities.

D. During construction, construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railings, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards. All such barriers shall have adequate warning lights as necessary, or required, for safety.

E. There shall be no oil dripping from equipment or oil spills.

1.07 STORAGE OF HAZARDOUS MATERIALS

A. The material shall be stored and handled in a proper and safe manner and upon its use, immediately dispose of the containers, cans, rags and remnants of the

material in a manner approved by the Department of Environmental Resources Management (DERM) at the Contractor's sole cost. The Contractor is not allowed to store empty containers at the site. In case of any violation, the Engineer will report such violation to DERM and the Contractor shall be subject to all penalties and fines as required by State and County regulations.

B. The Contractor is hereby cautioned that he cannot store any environmentally hazardous materials such as solvents, greases, lubricants or any other type of chemical substances at the Pump Station site. The Contractor shall be allowed to keep only such materials at the site for immediate use.

1.08 ACCIDENT REPORTS

A. If death, serious injuries, or serious damages are caused, report the accident immediately by telephone or messenger to the Engineer. In addition, the Contractor must promptly report in writing to the Engineer and the City all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

B. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, promptly report the facts in writing to the Engineer and the City, giving full details of the claim.

1.09 TRAFFIC SAFETY AND ACCESS TO PROPERTY

A. Comply with all rules and regulations of the city, state, and county authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the City and the controlling authority. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved barricades, signs, and lights where necessary for the safety of the public. The convenience of the general public and residents and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.

B. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained with temporary asphalt that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Access to businesses, schools and homes along the route of the work shall be provided by the Contractor at all times. Cleanup operations shall follow immediately behind backfilling and the worksite shall be kept in an orderly condition at all times.

C. Supply flagmen and guards or Police when they are required by regulation, when deemed necessary for safety, or required by the Engineer. Flagmen and Guards

shall be furnished with approved orange wearing apparel and other regulation traffic control devices.

1.10 FIRE PREVENTION AND PROTECTION

A. Perform all work in fire-safe manner. Furnish and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

1.11 DECLARED STATE OF EMERGENCIES

HURRICANE

A. Hurricane Preparedness: During such periods of time as are designated by the United States Weather Bureau as being a hurricane alert, the Contractor shall perform all precautions as necessary to safeguard the work and property, including the removal of all small equipment and materials from the site, lashing all other equipment and materials to each other and to rigid construction, and any other safety measures as may be directed by the Engineer.

B. Prior to the Start of Work: The Contractor shall submit for approval, a Plan of Action for the specific actions to be taken on his particular projects during a hurricane watch and hurricane warning.

C. Upon Notification of a Hurricane Warning

1. Formal notification to the Contractors to implement their approved Plan of Action to protect the project and the public.
2. For construction projects at a Plant or Pump Station, a copy of the notifications will be provided to the Plant Superintendent or, for Pump Stations, to the Engineer. The Plant Superintendent or Engineer may notify the Construction Superintendent of any assistance he may need for the Contractor in order to secure the Plant or Pump Station.
3. For pipeline construction projects within the public right-of-ways, the Contractor will be notified by the Construction Manager Office to suspend his construction operations. The Contractor will backfill all open trenches, remove all construction equipment and materials from the right-of-way, remove unnecessary traffic barricades and signs, secure remaining barricades by "half burial" or "double sand bags".

POST DISASTER WORK

A. In the event of a disaster declaration by the Local or State governing authorities, the Department may choose to obtain the services of the Contractor to perform

work made an imminent priority for the disaster event. The compensation for the additional work caused by the disaster shall be negotiated between the Engineer and the Contractor with written approval provided by both parties prior to mobilizing at the designated location or locations. The value of the work performed shall be up to the amount of the original contract with contingencies and dedicated allowances.

1.12 JOINT SURVEY TO ESTABLISH AUTHENTICITY OF POSSIBLE DAMAGE CLAIMS

A. The Contractor shall maintain vertical and horizontal survey control points on all structures and improvements, located in the vicinity of the work prior to beginning work, and shall periodically check the points for movements with copies provided to the Engineer, of the survey notes for each survey and a copy of the layout of the survey control points.

B. After the contract is awarded and before commencement of work, the Contractor shall perform a thorough examination of existing buildings, structures, and other improvements in the vicinity of the work, as applicable, which might be damaged by his operations.

1. Examinations of existing structures, buildings, and other improvements in the vicinity of the work shall be done by the Contractor. The scope of the examination shall include cracks in the structures, settlement, leakage, and similar conditions. The City assumes no responsibility for pre-existing conditions of the structure.

2. Records in triplicate of all observations shall be prepared by the Contractor, photographs shall be taken by the Contractor signed and dated, with descriptive information and in the manner specified above. One signed copy of every document and photograph will kept on file in the office of the Engineer. Video recording also required.
3. The above records are intended to be used as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the Contractor and the City, and will be a means of determining whether and to what extent damage, resulting from the Contractor's operations, occurred during the Contract work.

C. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. Preconstruction videos and digital pictures shall be taken with date stamps of the entire area of work. A copy of all such notices shall be forwarded to the City.

1.13 TRAFFIC CONTROL AND USE OF PUBLIC STREETS

A. The Contractor shall be responsible for traffic control as specified hereinafter. Any reference to Miami-Dade County, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas of streets or their departments, published regulations, permits, or data. Abide by all applicable laws, regulations and codes thereof, pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.

B. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control and other provisions, throughout the project as required by the Metropolitan Dade County Department of Public Works, Traffic Engineering Division (Traffic Division). Traffic shall be maintained according to corresponding typical traffic control details as outlined in the Dade County Public Works Manual. No street shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.

C. If required by the Traffic Division, employ the required number of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. If required for traffic control permits or agencies, the Contractor shall work odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction.

D. The Contractor shall provide all barricades and/or flashing warning lights necessary to warn motorist of the construction throughout the project.

E. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. Provide necessary access to all adjacent property during construction.

F. The contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Dade County Public Works Manual. In addition, provide for the resetting of all traffic control and information signing removed during the construction period.

G. Where excavations are to be made in the vicinity of signalized intersections, attention is directed to the fact that vehicle loop detectors may have been embedded in the pavement. Verify these locations by inspecting the site of the work and by contacting the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via www.sunshine811.com) . Any loop detector which is damaged, whether shown on the Plans or not, shall be repaired or replaced to the satisfaction of the Traffic Division.

H. Notify the Traffic Division 24 hours in advance of the construction date, and 48 hours in advance of construction within any signalized intersection.

I. Temporary pavement will be required over all cuts in pavement areas, and also where

traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed and the swale or median area restored to their previous condition.

1.14 WORKING IN CONFINED SPACES

Where a Contractor needs to work in a confined space, the Contractor must comply with the General Industry, OSHA Confined Space Standard, 29 CFR 1910.146 or the equivalent Confined Space Standard in CFR 1926, Safety and Health Regulations for Construction Standards.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01031

GRADES, LINES AND LEVELS

PART 1 - GENERAL

1.01 SCOPE

This work of this Section comprises the establishing of grades, lines and levels.

1.02 RELATED WORK

Section 01720 - Project Record Documents
Section 01725 - Project As-Builts

PART 2 - PRODUCTS

2.01 Materials:

Furnish all stakes, templates and other materials necessary for establishing and maintaining of the lines and grades necessary for control and construction of the Work and all incidental labor necessary for the prosecution of the Work.

PART 3 - EXECUTION

3.01 LAYOUT OF THE WORK:

A. GENERAL

1. The Engineer of Record, through retaining the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida, shall furnish the Contractor with horizontal and vertical controls which shall be utilized as specified elsewhere herein to layout the work. The Professional Land Surveyor and Mapper, who is licensed in the State of Florida hired by the Contractor, shall verify all controls provided by the Engineer of Record and it shall be the responsibility of the Contractor to preserve same.

2. The Contractor shall retain the services of a Professional Land Surveyor and Mapper, who is licensed in the State of Florida who, shall furnish and set stakes, establishing line and grade and shall solely be responsible for the layout of the work as well as the recording of all as-built dimensions and elevations. The Contractor shall furnish all additional stakes, templates, and other materials for marking and maintaining survey points and lines given, and shall be responsible for their preservation. Should any of the horizontal and vertical control points set by the Engineer of Record be

destroyed or disturbed, they shall be reset by the Contractor's Florida Registered Land Surveyor and Mapper, at the Contractor's expense. All control points previously set by the Engineer of Record shall be verified by the Contractor's surveyor.

B. LAYOUT

As provided in Subsection 3.01-A, above, the Contractor through the services of his Florida Registered Land Surveyor and Mapper, shall establish the line and bench mark and other reference points for the pipeline or structure, as follows:

1. Structures: Will consist of baselines, stakes at building corners, centers and centerlines, auxiliary lines and two bench marks from which to establish the elevations. The Engineer of Record shall set a minimum of three horizontal and vertical control points which shall thereafter be maintained by the Contractor, without further help from the Engineer of Record, for use in establishing and checking the lines and grades as shown on the contract drawings.

2. Pipelines: Will consist of baselines, construction lines, centerlines, auxiliary lines and bench marks from which to establish the elevations. The Engineer of Record shall set horizontal and vertical control points at the beginning and end of the work and at a minimum distance of 1,400 ft. in between. When the total distance is less than 1,400 ft. control points shall be set at the beginning and end of the work.

3. The Contractor shall use this information to construct the structures and pipelines to the lines and grades shown on the project drawings and shall supply all equipment and personnel necessary to accomplish this end.

4. For pipelines, this will consist of establishing all points of bend (but not necessarily bevel pipe unless in close proximity to other facilities), valves, tees, crosses and other stations not more than 100 feet apart along the proposed centerline of the pipe, or along a stationed offset line as shown on the Plans, marked by a nail in a metal cap if in pavement, with the station painted nearby or by a nail in the top of a wooden stake driven flush with the ground with the station marked on the flag stake nearby, if not in pavement.

5. The Contractor shall supply the Department Inspector with a copy of the Florida Registered Land Surveyor and Mapper's layout of the work immediately upon its availability to his own forces.

6. The Contractor shall make his equipment and men available to the Inspector for spot checking the accuracy of the pipe laying. The Inspector shall require the Contractor to correct pipe alignment when necessary.

C. RECORD DRAWINGS:

1. During the entire construction operation, the Contractor shall retain the services of a State of Florida Registered Land Surveyor and Mapper who shall maintain records of

the installation, including all deviations from the Plans and Specifications by obtaining "as-built" dimensions and elevations.

2. The Surveyor shall prepare Record As-Built Drawings showing correctly and accurately all changes and deviations made during construction, including approved construction variances, to reflect the work as it was actually constructed.

3. Refer to Sections 01720 and 01725 for Department's criteria for developing project record documents and record As-Built drawings.

D. HORIZONTAL AND VERTICAL CONTROL FOR DESIGN

The following shall apply when establishing horizontal and vertical controls for design. They shall also be used for the development of construction drawings.

1. Survey stationing shall proceed from south to north and/or from west to east.

2. Baseline or centerline shall be tied to section corners, or to monument lines or to right-of-way lines.

3. Points along the survey line shall be referenced to perpetuate the alignment. Whenever possible, the reference points shall be established at right angles to the survey line and at intervals no longer than 1,400 feet. Reference points shall be shown on construction plans.

4. Centerline of side streets shall be established and set by nail and disc. Station and angle turned shall be given and shown on the plans.

5. All curve data (horizontal) shall be shown on Plans. Point of curvature and point of tangency shall be set in the field, reference P.C. and P.T. or P.I.

6. Easement lines shall be tied to baseline or centerline. Give station and angle turned.

7. Set centerline or baseline stations every 100 feet on the ground using iron rods in unpaved areas or P.K. nails on asphalt.

8. On vertical control refer to datum used (such as NGVD 88, NGVD 1929, City of Miami). Nationwide, surveys and as-builts are in the process of conversion to NAVD 88 from the NGVD 1929. The Department will accept NAVD 88 datum with a conversion factor on each page. The Florida Department of Transportation is using the NAVD 88 datum. Projects within FDOT roadway limits shall either use NAVD 88 datum or provide a conversion factor on each page if the NGVD 1929 datum is used. For projects using City of Miami datum provide a conversion factor on each page to the NAVD 88 datum.

9. Temporary bench marks (T.B.M.) and bench marks shall be established throughout the project at approximately 1,000 feet intervals. Show information on plans

10. Centerline shall be tied to baseline if different from each other.

11. Tie proposed pipe to centerline or baseline, not to right-of-way line. Right-of-way line shall be tied to centerline or baseline.

12. All survey information shall be shown on the plans.

13. All point of intersections and deflection angles shall also be shown. Angle can be submitted by bearings.

END OF SECTION

SECTION 01070

CUTTING AND PATCHING

PART 1 GENERAL

1.01 SCOPE OF WORK

A. Work Included: This section includes work required to provide complete, in place, cutting, fitting, and patching of new and existing work.

1. Do not imperil any work by cutting or altering work or any part of it.
2. Do not cut structural or reinforcing steel without the written consent of the Engineer.

1.02 DESCRIPTION OF WORK

A. Execute cutting (including excavating), fitting or patching of work, required to:

1. Make the several parts fit properly.
2. Uncover work to provide for the installation of ill-timed work.
3. Remove samples of installed work as specified for testing.
4. Install specified work in existing construction.

B. In addition to Contract requirements, upon written instructions from the Engineer:

1. Uncover work to provide for Engineer's observation of covered work.
2. Remove samples of installed materials for testing.

1.03 SUBMITTALS DURING CONSTRUCTION

A. Prior to cutting which affects structural integrity or safety, submit written notice to the Engineer and other Contractors, requesting consent to proceed with cutting.

B. All cutting and patching, to be performed at no additional cost to the Department.

C. Should conditions of work, schedule, indicate change of materials or methods, submit written recommendation to the Engineer, including:

1. Conditions indicating change.
2. Recommendations for alternative materials and/or methods.
3. Submittals as required for substitutions.
4. Submit written notice to the Engineer, designating time work will be uncovered, to provide for observation.

PART 2 PRODUCTS

2.01 GENERAL

A. Materials for replacement of work removed shall comply with applicable sections of these specifications for type of work to be performed. Materials not specified herein

shall be replaced as specified in Sub- Section 3.03 of this Section, Restoration.

B. Provide all tools and equipment required to accomplish cutting and patching.
C. Completely remove damaged or deteriorated concrete or other material.
D. Legally dispose of all demolition debris generated by the project. The Contractor shall pay for all loading, hauling, transportation and applicable tipping fees.

PART 3 EXECUTION

3.01 INSPECTION

A. Inspect existing condition of work, including elements subject to movement or damage during cutting, patching, excavating, and backfilling.

B. After uncovering work, inspect conditions affecting installation of new products.

3.02 PERFORMANCE

A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances and finishes.

B. Execute cutting and demolition as specified below:

1. The cutting and removal of existing work necessary for modifications and installation of new work shall be made with a minimum of damage to the work that is to remain. Any damage done to existing facilities which are to remain shall be repaired at the Contractor's expense to the satisfaction of the Department.
2. When removing materials, or portions of existing structures, and when making openings in walls and partitions, the Contractor shall take all precautions and use all necessary barriers and other protective devices so as not to damage the structures beyond the limits necessary for the new work, and not to damage the structures or contents by falling or flying debris. Unless otherwise permitted, line drilling will be required in cutting existing concrete.
3. Surfaces of seals visible in the completed work shall be made to match as nearly as possible the adjacent surfaces.
4. Non-shrink grout shall be used for setting wall casting, sleeves, and leveling equipment bases. Doweling anchors into existing concrete and elsewhere as required shall be done with an approved type of epoxy material.
5. Debris created within facilities, which are to remain in service during the modification work, shall be removed daily. Operators of the Department and Contractor's employees shall not be subjected to hazardous areas, when performing their duties.
6. Follow other specific instructions for the modification work given in other sections of these specifications and as shown on the Drawings. Should these instructions conflict, the more stringent conditions shall prevail.

C. Restore work which has been cut or removed; install new products to provide completed work in accordance with the requirements of Contract Documents.

3.03 RESTORATION

A. Restore structures and surfaces damaged during the course of this Contract that are to remain in the completed work.

B. Restoration shall be done with new materials and appropriate methods as specified elsewhere in these specifications for new work of similar nature; if not specified, best recommended practice of manufacturer, or appropriate trade association.

C. Restore damaged work in such a way that there is a secure intimate bond or fastening between new and old work. Restored surfaces shall be finished to such planes, shapes, and textures that no transition between new and old work is evident in finished surfaces.

3.04 CLEANING

A. Remove from site all debris, rubbish, and extra material caused by cutting and patching.

END OF SECTION

SECTION 01340

SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Department has established a "Pre-Approved Product List" for products to be used in the construction of water and sewer facilities. The "Pre-Approved Product List" lists manufacturer's product models pre-approved by the Department which meet the minimum requirements established in the Department's design and construction standards and specifications. However, not all products that may be used in the construction of water and sewer facilities that meet the Department's design and construction standards and specifications are listed in the "Pre-Approved Product List." The "Pre-Approved Product List" is not an exclusive collection of all qualified and approved products. For those products that are not on the "Pre-Approved Product List," the Contractor shall submit shop drawings as specified herein.

B. Contractors and suppliers can submit the "Pre-Approved Product List(s)" for the products that they intend to use in the construction of the water and sewer facilities for the Project. Products listed in the "Pre-Approved Product List" do not require the submittal of shop drawings to the Department. The "Pre-Approved Product List(s)" must be stamped, reviewed and initialed by the Contractor and by his engineer, if applicable, prior to submittal to the Department. A "Submittal Summary Sheet" must accompany all "Pre-Approved Product List" submittals. Both forms can be found in the Department website at www.miamidade.gov/water/pre-approved-product-list.asp.

B. Shop Drawings (including Pre-Approved Product List submittals) shall be submitted prior to any project construction activity. In a timely fashion, well before the contemplated ordering for fabrication of special order or long-lead items or construction use of any standard element of the work, the Contractor shall furnish Shop Drawings for the review and approval of the City.

C. It is the Contractor's sole responsibility, upon the first occasion of submittal of a particular element of the work, to submit Shop Drawings of an element which match and fulfill the requirements and intent of the Plans and Specifications. Any delays or costs caused, either directly or indirectly, by non-timely submissions; submission of items differing significantly from the intent of the Plans and/or Specifications; repeated submission of, or argument over, rejected elements or changes required for acceptance; arguments with the criteria or requirements of the Plans or Specifications; or any other such similar activities shall be at the expense of the Contractor.

D. It is the intent of the Contract Documents that the Contractor shall, in the first instance, submit Shop Drawings of elements which meet or exceed the requirements of the Contract Documents and fit with the other elements of the work and the existing conditions. Delays or the inability to obtain shop drawing approval may subject the Contractor to costs for liquidated or actual damages as specified in the Contract.

E. The approval of Pre-Approved product sheets, shop drawings and data will be general and shall mean that upon examination of the drawings, no variations from the approved project drawings and project requirements have been discovered, and approval will not relieve the Contractor of his responsibilities as defined above. The Department's review will not constitute an approval of dimensions, quantities and details of the material, equipment or item shown.

1.02 CONTRACTOR SUBMITTALS

A. The Contractor shall submit a minimum of four (4) hardcopies of the shop drawing submittal package to the Water and Sewer Department Document Control Section. PDF files of the entire submittal package along with the hard copies are encouraged to simplify the approval process.

B. The Shop Drawing submittal package shall include a transmittal, submittal registry and the pre-approved product list or shop drawing sheets stamped by the Contractor.

C. The Contractor shall meet with the Department Engineer (Construction Manager) the after Project Award to begin the shop drawing submittal process and establish a schedule for submittal and approval.

D. Where there is a deviation from the Specifications, the Contractor shall note it and state the reasons why a deviation is required.

1.03 DESCRIPTION OF WORK

A. Submit to the Engineer for review and approval, Shop Drawings, test reports and data on materials, equipment, and material samples as required for the proper control of work, and as specified in the Specification sections. Shop Drawings shall be submitted for all materials and equipment to be furnished.

B. After award of the project, the Contractor may begin providing submittals for approval. Submit to the Engineer a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way expressed or implied relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the Specifications. This procedure is required in order to expedite

final review of Shop Drawings.

C. Maintain an accurate updated Shop Drawing submittal log which shall include the following items:

1. Submittal Description and Number Assigned
2. Specification Section
3. Plans Sheet Number
4. Date to Engineer
5. Date Returned to Contractor (from Engineer)
6. Status of Submittal (Approved, Approved as Noted, Rejected/Resubmit)
7. Date of Resubmittal and Return (as Applicable)
8. Date Material Release (for Fabrication)
9. Projected Date of Fabrication
10. Projected Date of Delivery to Site
11. Status of O & M Manuals Submittal

1.04 CONTRACTOR'S RESPONSIBILITY

A. Furnish the Engineer with a schedule of Shop Drawings submittals, fixing the respective dates for the submission of Shop Drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.

B. Submit to the Engineer all plans and schedules sufficiently in advance of construction requirements to provide maximum time for checking and appropriate action from the time the Engineer receive them.

C. It is the duty of the Contractor to check and approve all plans, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the Plans and data shall bear Contractor's stamp showing that they have been checked and approved. Shop Drawings submitted to the Engineer without the Contractor's stamp and approval shall be returned to the Contractor for conformance with this requirement before Engineer's review. **Shop Drawings shall indicate any deviations in the submittal from requirements of the Project Documents and the Contractor shall state the reason why a deviation is required.**

D. All submittals shall be accompanied by a submittal registry and transmittal letter containing the following information:

1. Date
2. Project Title and Number
3. Contractor's name and address
4. The number of each Shop Drawing, Data, and Sample submitted
5. Notification of Deviations from Project Documents
6. Submittal Log Number conforming to and referring to Specification Section

Numbers

E. Submit seven copies of Shop Drawings and of descriptive or product data submittals necessary to complement Shop Drawing. The Engineer will retain five sets.

F. After receiving approval by the Engineer, the Contractor shall be responsible for submitting the Shop Drawings to the Building Department. Shop Drawings of all premanufactured items and all other Shop Drawings are required to obtain approval prior to manufacturing or installing the submitted items. The Contractor shall also be responsible for contesting any interpretations by the Building Department that the City considers non-acceptable. The Contractor shall include in the bid prices, all costs for permits, fees and expenses associated with the submittals, including resubmittals (if any) of Shop Drawings to the Building Department. The Building Department as used in this paragraph shall be taken to mean the Miami-Dade County Building Department and/or other governing building authority appropriate to this project.

G. Do not begin any of the work covered by a drawing, data, or a sample returned as “Rejected/Resubmit” until a revision or correction thereof has been reviewed and returned to the Contractor, by the Engineer, with approval or approval “As Noted”. Be responsible for and bear all costs of damages which may result from the ordering of any material or from proceeding with any part of work prior to receiving Engineer's approval or approval “As Noted” of the necessary Shop Drawings.

H. Be fully responsible for observing the need for and for making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the materials/equipment the Contractor proposes to supply, both as they pertain to the Contractor’s own work, work of others, or of other Divisions herein or Trades and clearly show such changes on the Shop Drawings.

I. When substitutions in materials or equipment are allowed, the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his expense. Said engineering design services shall be of an extent satisfactory to the Engineer whose word shall be final and shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.

J. When substitutions in materials or equipment are allowed, the Contractor shall be solely responsible for all costs and time required by any differences in construction methods, fabrication or assembly required and no additional time will be allowed.

K. When a construction change, initiated by the Contractor or resulting from a change made by the Contractor, requires re-permitting as discussed in the preceding paragraph, the Contractor shall be responsible for all labor, material and equipment required to redraw the Plan sheet or sheets affected by the change to the satisfac-

tion of the Engineer of Record and the City. The costs for all work of this sort and all costs of re-permitting shall be borne by the Contractor and no extra com-pensation will be allowed.

L. Determine and verify:

1. Field measurements
2. Field construction criteria
3. Catalog numbers and similar data
4. Conformance with specifications
5. That installation and maintenance clearances are sufficient particularly when equipment or arrangement changes have been made

1.05 ENGINEER'S REVIEW OF SHOP DRAWINGS

A. Engineer's review of plans, data and samples, submitted by the Contractor will cover only general conformity to the Drawing and Specifications. The Engineer's review will not constitute an approval of dimensions, quantities, and details of the material, equipment, device, or item shown. The review of plans and schedules will be general, and shall not be construed:

1. As permitting any departure from the Contract requirements
2. As relieving the Contractor of responsibility for any errors, including detail, dimensions, and materials
3. As approving departures from details furnished by the Engineer, except as otherwise provided herein

B. Variations

1. If the plans or schedules, as submitted, describe variations per paragraph 1.03 C, and show a departure from the Contract requirements which Engineer finds to be in the interest of the City and to be so minor as not to involve a change in Contract price or time for performance, the Engineer may return the reviewed plans without noting an exception.
2. If the plans or schedules, as submitted, describe variations and show a departure from the Contract requirements which the Engineer finds to be minor enough to be corrected by redlining the submittal, the engineer will mark and return the submittal marked "Approved as Noted." The redlined corrections shall be as binding on the Contractor as would be a resubmission embodying the same corrections.

C. When reviewed by the Engineer, each of the Shop Drawings shall be stamped and dated to indicate it had been reviewed. Shop Drawings stamped "Revise and Resubmit" and with required corrections shown will be returned to the Contractor for correction and resubmittal.

D. Resubmittals will be handled in the same manner as first submittals. On resubmit-

tals the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions and corrections required by the Engineer on previous submissions. The Contractor shall make any corrections required by the Engineer.

E. If the Contractor considers any correction indicated on the Shop Drawings to constitute a change to the Project Plans or Specifications, the Contractor shall give written notice thereof to the Engineer who will render a decision which shall be final. After the decision has been made, the Contractor shall without delay, provide the corrections to the plans.

F. When the Shop Drawings have been approved by the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

G. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor for resubmittal. Unless otherwise specifically permitted by the Engineer, all submittals shall be made in groups containing all associated items for systems, processes or as indicated in specific specifications sections. All plans, schematics, manufacturer's product data, certifications and other Shop Drawing submittals required by a system specification shall be submitted at one time as a package to facilitate interface checking.

1.06 SHOP DRAWINGS

A. When used in the Project Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for materials and equipment which become an integral part of the Project. These Shop Drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance/test data shall be considered only as supportive to required Shop Drawings as defined above.

B. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked to identify pertinent materials, product or models. Information which is not applicable to the Work shall be deleted by striking or cross hatching.

C. Shop Drawing shall have a submittal registry and display the following:

1. Project Title and Number
2. Name of Project Building or Structure
3. Number and Title of the Shop Drawing
4. Date of Shop Drawing or Revision
5. Name of Contractor and Subcontractor Submitting Drawing
6. Supplier/Manufacturer
7. Separate Detailer when Pertinent

8. Specification Title and Number
9. Specification Section
10. Application Project Drawing Number

D. If plans show variations from Contract requirements because of standard shop practice or for other reasons, describe such variations in the letter of transmittal. If no explanation of these variations is provided, the Contractor shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such plans have been reviewed and approved.

E. For all mechanical and electrical equipment furnished, provide a list including the equipment name, address of and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.

F. All manufacturers or equipment suppliers who propose to furnish equipment or products shall submit an installation list to the Engineer along with the required Shop Drawings. The installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least five years, unless otherwise specified. Manufacturers and/or equipment which fails to meet the specified experience period will be considered if the manufacturer or supplier provides a bond or cash deposit which will guarantee replacement of the equipment or process in the event of failure or unsatisfactory service.

G. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.

1.07 REQUIRED INFORMATION

A. Submit, as applicable, the following for all prefabricated or manufactured structural, mechanical, electrical, plumbing, process system, and equipment work:

1. Shop Drawings or equipment drawings, including dimensions, size and location of connections to other work, and weight of equipment
2. Catalog information and cuts
3. Installation or placing plans for equipment, drives, and bases
4. Supporting calculations, signed and sealed by a Florida Registered Engineer when required, for equipment and associated supports, or hangers required or specified to be designed by equipment manufacturers
5. Signed and sealed calculations and plans by in-house Florida Registered Professional Engineer for structural systems, indicating compliance to the structural design criteria specified in the Plans
6. Complete manufacturer's specifications, including materials description and paint system
7. Performance data and pump curves
8. Suggested spare parts with current price information
9. List of special tools required for testing, checking, parts replacement, and maintenance. (Special tools are those which have been specially designed

or adapted for use on parts of the equipment, and are not customarily and routinely carried by maintenance mechanics)

10. List of special tools furnished with the equipment
11. List of materials and supplies required for the equipment prior to, and during startup
12. List of materials or supplies furnished with the equipment
13. Special handling instructions
14. Requirements for storage and protection prior to installation
15. Requirements for routine maintenance required prior to equipment startup
16. List of all requested exceptions to the Project Documents

1.08 SUBMITTAL REQUIRED FOR FOREIGN MANUFACTURED ITEMS

A. In addition to the submittal requirements stated above, suppliers of foreign manufactured items shall submit the names and addresses of companies within the United States that maintain technical service representatives and a complete inventory of spare parts and accessories for each foreign-made item proposed for incorporation into the Work. Failure to prove these capabilities shall be cause for rejection of the foreign manufactured items.

B. Foreign manufactured equipment and materials shall in all cases be clearly and permanently marked with the manufacturer's name and country of origin of the item. The name of the U.S. importing/supplying firm is not acceptable. Shop Drawing submittals of foreign-made items shall be accompanied by written information to include name and location (i.e. country, City, and street address) of the manufacturer. This requirement shall also apply to the foreign made elements of items assembled in this country from parts wholly or partially manufactured overseas.

1. The words, "Permanently Marked" as used in this paragraph shall mean; die stamped, cast-in, welded, or otherwise marked such that the removal of the marking by any mechanical or chemical means will result in obvious permanent damage to the surface marked. These markings shall be on surfaces which are not hidden by assembly.

C. Where specified elsewhere herein or at the sole discretion of the Engineer, whose word shall be final, supply verification of quality, suitability or other aspects, as directed by the Engineer, from a Professional Engineer licensed to practice in the State of Florida or the state where the supplying U.S. firm is located. The verification shall be signed, sealed, and dated. All costs for this verification shall be at the sole expense of the Contractor and no extra compensation will be allowed. Verification by foreign-based engineers, firms, manufacturers, etc. will not be acceptable. Verification by means of a very stringent foreign testing agency/standard (for example ISO 9000 series) may be acceptable. However, this shall again be at the sole discretion of the Engineer and the full burden of proof and satisfaction of the City shall rest with the Contractor. No extra time will be permitted due to the requirement for verification and the Contractor has the sole responsibility to make

his submittals with all necessary information in a timely fashion.

1.09 SAMPLES

A. Furnish for the approval of the Engineer, samples required by the Project Documents or required by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until approved by the Engineer.

B. Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices
2. Full range of color, texture and pattern
3. A minimum of two samples of each Item shall be submitted

C. Each sample shall have a label indicating:

1. Name of Project
2. Material or Equipment Represented
3. Name of Producer and Brand (if any)
4. Location in Project

D. Prepare a transmittal letter in triplicate for each shipment of samples containing the information specified herein in Paragraph 1.06 A. Enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use specified and shall not be construed to change or modify any Contract requirements.

E. Approved samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the approved samples. Samples which failed testing or were not approved shall be returned to the Contractor at his expense, if so requested at time of submission.

1.10 SUBSTITUTIONS

A. Changes in products, materials, equipment, and methods of construction required by the Contract Documents, which are proposed by the Contractor after award of the Contract, are considered to be requests for substitutions. Where the Plans and/or Specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use. Articles or products of similar characteristics may be offered for the approval of the Engineer, whose decision shall be final. Copies of complete descriptive data shall be fur-

nished regarding all materials furnished by the Contractor, consisting of Dimension drawings, catalog references, product data, cost, and other information necessary to clearly identify and evaluate each article. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent, connected, or other structures and equipment at his expense.

B. Where engineer-recommended changes, substitutions or appurtenant work require engineering design, the Contractor shall have such design services performed. Those engineering design services shall be of an extent satisfactory to the Engineer, whose decision shall be final. Engineering services for engineer-recommended changes, substitutions or appurtenant work, shall be performed by a Registered Professional Engineer licensed to practice in the State of Florida.

C Unless specifically authorized by the Engineer in writing, no additional contract time will be allowed, and a decrease in time may be appropriate.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01410

TESTING AND TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The City will employ and pay for services of an independent testing laboratory to perform testing as indicated in the Project Documents, and may at any time elect to have materials and equipment tested for conformance with the Project Documents.

B. Cooperate with the laboratory to facilitate the execution of its required services.

C. Testing laboratory inspection, sampling and testing will be required for, but not limited to, the following:

1. Soil Compaction
2. Cast-in-Place Concrete
3. Mechanical Work

1.02 CONTRACTOR'S RESPONSIBILITIES

A. Cooperate with laboratory personnel and provide access to Work.

B. Make available, at no cost to the City, adequate quantities of representative samples of materials proposed to be used and which require testing.

C. Provide to the laboratory the preliminary design mix approved to be used for concrete, and other materials mixes, which require control by the testing laboratory.

D. Furnish incidental labor and facilities:

1. To provide access to work to be tested
2. To obtain and handle samples at the Project site or at the source of the product to be tested
3. To facilitate inspections and tests
4. For storage and curing of test samples

E. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

1.03 PAYMENT FOR TESTING

A. The City will pay for initial testing services required elsewhere in these Specifications.

B. When initial tests indicate non-compliance with the Project Documents, subsequent retesting occasioned by the non-compliance shall be performed by the same Testing Laboratory, and all costs thereof shall be paid for by the Contractor.

C. Inspecting and testing, performed exclusively for the Contractor's convenience, shall be the sole responsibility of and shall be paid for by the Contractor.

1.04 QUALITY ASSURANCE

A. Upon completion of each test and/or inspection, promptly distribute copies of test or inspection reports to the Engineer, the Contractor, to governmental agencies requiring submission of such reports, and to other persons as directed by the Engineer.

PART 2 PRODUCTS

2.01 TEST METHODS

A. Tests and Inspections will be conducted in accordance with the requirements of these specifications or, if not herein specified, in accordance with the latest standards of the American Society for Testing and Materials (ASTM), or other approved and recognized authorities as acceptable to the City.

B. Requirements for testing are described in various Sections of these Specifications.

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01710

CLEANING

PART 1 GENERAL

1.01 SCOPE OF WORK

A. This Section specifies the maintenance of the work site in a clean, orderly, hazard-free condition.

1.02 QUALITY ASSURANCE

A. Conduct cleaning and disposal operations in accordance with local ordinances and anti-pollution laws. Rubbish, volatile wastes, and other construction wastes shall be neither burned nor buried on the work site, and shall not be disposed of into storm drains, sanitary drains, streams or other waterways.

B. Final cleaning shall be accomplished either by workmen experienced in cleaning operations or by professional cleaners.

1.03 DISPOSAL REQUIREMENTS

A. Conduct cleaning and disposal operations to comply with local codes, ordinances, regulations, and anti-pollution laws. Do not burn or bury rubbish or waste materials on Project site. Do not dispose of volatile wastes, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains, Volatile wastes shall be disposed in accordance with proper laws and be approved by the Department. Do not dispose of wastes into streams or waterways.

PART 2 PRODUCTS

2.01 ON-SITE WASTE CONTAINERS

A. Provide on-site waste containers for collection of waste materials, debris and rubbish. See Section 01100 - Special Project Procedures, Subsection 1.05 regarding Safety Requirements for environmentally hazardous materials.

2.02 CLEANING MATERIALS

A. Cleaning materials shall be as recommended by the manufacturer of the surface to be cleaned.

PART 3 EXECUTION

3.01 SAFETY REQUIREMENTS

A. Maintain work site in accordance with local ordinances and anti-pollution laws

applicable to work site cleanliness and in a neat, orderly and hazard-free condition until final acceptance of the work. Catwalks, accessible underground structures, work site sidewalks and walkways adjacent to the work site shall be kept free from hazards caused by construction activities.

B. Store volatile wastes including rags in covered metal containers, and remove from work site daily.

C. Prevent accumulations of wastes which create hazardous conditions.

D. Artificially ventilate spaces which are not naturally ventilated when volatile or noxious substances are present in those spaces.

3.02 CLEANING DURING CONSTRUCTION

A. Perform cleaning every workday for duration of the Work. Structures, grounds, and areas of the work site, access roads and adjacent public and private properties shall be maintained free from accumulations of waste materials and rubbish caused by construction operations on the work site. Place waste materials and rubbish in on site containers or as otherwise approved. Unneeded construction equipment shall be removed and all damaged repaired so that the public and property owners will be inconvenienced as little as possible.

B. Remove or secure loose material on open decks and on other exposed surfaces at end of each day's work or more often to maintain work site in hazard-free condition.

C. Prevent dislodgement of materials due to wind and other forces. Wet down dry materials and rubbish to lay dust and prevent blowing dust. Cover or wet excavated material leaving and arriving at the site to prevent blowing dust. Clean the public access roads to the site of any material falling from the haul trucks.

D. Empty on-site waste containers whenever necessary so that trash overflow does not occur. Legally dispose of contents at either public or private dumping areas.

E. Control the handling of materials, debris and rubbish; do not drop or throw from heights.

F. Immediately remove spillages of construction-related materials from hauling routes or the site.

G. Where material or debris has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes, structures, or elsewhere during the course of the Contractor’s operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc., shall, upon completion of the work, be left in a clean and neat condition.

3.03 FINAL CLEANING

A. In addition to the cleaning performed above, in preparation for final inspection, remove grease, dust, dirt, rust stain from surfaces. Remove labels, fingerprints and other foreign materials from exposed exterior finished surfaces. Flush down all manhole covers and frames, valve boxes, and areas leaving such surfaces clean of all sand, laitances, etc.

B. In preparation for final acceptance or occupancy, conduct final inspection and cleaning of exposed exterior surfaces, and of concealed spaces.

C. Maintain cleaning operations until project has been finally accepted.

END OF SECTION

SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 DESCRIPTION

A. Scope of Work: For contracts where the work is performed at an on-site location maintain one record copy of:

1. Record Drawings. Record Drawings as used herein shall mean a drawing that accurately records constructed improvements and any field changes.
2. Record Specifications.
3. Addenda.
4. Change Orders and other modification of the contract.
5. Engineer's written orders or instructions.
6. Approved Shop Drawings, Product Data and Samples.
7. Field Test records.
8. Construction photographs.
9. As built dimensions and elevations as recorded by the Contractor's Florida Licensed Professional Surveyor and Mapper (PSM) on a daily basis.
10. Field Book. Survey Field notes taken by the Florida Licensed Professional Surveyor and Mapper’s survey crew (copy provided to the Engineer on a monthly basis).

B. The records listed above are to be made available to the Engineer at all times for all projects.

C. Related Requirements Described Elsewhere:

1. Section 01340: Shop Drawings, Product Data and Samples.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Maintain documents in a clean dry, legible, condition and in good order. Do not use record documents for construction purposes.

1.03 REQUIRED MEASUREMENTS

A. Set-up and Verification: The Contractor’s Florida Licensed Professional Surveyor and Mapper is required to recover the design baseline and verify the elevations and coordinates on a regular basis as needed.

B. The Contractor is required to have a level instrument setup next to the construction site in order to control the vertical alignment of the pipe installation

prior to trench backfilling. The level shall be setup daily for use by the surveyor, Contractor's foreman and Department Engineer/Inspector. Any underground construction work that does not have a level properly setup will be stopped by the Department Engineer/Inspector.

C. The Contractor is required to have a survey crew record the field information on a daily basis when there is underground pipe installation. The survey crew shall be on-site as needed to record and verify the information before it is covered. Any underground construction work that does not have the information recorded by a survey crew will be stopped by the Department Engineer/Inspector. The Engineer/Inspector has the authority to order re-excavation of work that was covered without accurate survey measurements.

D. Field Book Information: The Florida Licensed Professional Surveyor and Mapper is required to have his crews make daily visits to the project site during underground pipe installation work to perform field measurements of the Contractor's daily installations. This information shall be recorded in field books. Copies of the field notes are required to be provided to the Construction Manager on a monthly basis. The surveyor's field notes of the surveyor shall be submitted to the Department along with partial as-builts plans (signed and sealed) on a monthly basis as a condition of payment.

1.04 PROJECT RECORDS

A. During the life of the Contract the Contractor shall retain the services of a Florida Licensed Professional Surveyor and Mapper (PSM) who shall maintain daily records of the installation, including all deviations from Plans and Specifications and for the purposes of preparing and submitting to the Department an as-built/record survey in compliance with:

1) Florida Statutes Chapter 472.027.

2) Florida Administrative Code Chapter 5J-17.050, 5J-17.051 and 5J-17.052

3) As further required by these Contract Documents.

B. The Measure and Recording of all information required in Subsection A above for all projects concurrently with construction progress. The services of the Florida Licensed Professional Surveyor and Mapper for the project shall be retained by the Contractor prior to the issuance of the Notice to Proceed. A letter from the Florida Licensed Professional Surveyor and Mapper shall be provided at the preconstruction meeting indicating that the Contractor has secured his services to perform all survey work for the duration of the project and prepare final as-builts plans.

C. Submit redlines, partially completed as-built plan sheets and fully complete as-built Plan sheets and certified copies of field book information to include raw data of the measurements all as required by and satisfactory to, the Engineer as

prerequisite for the acceptance of monthly payment applications.

D. Label each document "PROJECT RECORD" in neat large printed letters.

1. Record all information for pipeline projects and on-site projects concurrently with construction progress.

2. Do not conceal any work until as-built information is recorded by the Contractor's surveyor.
3. All locations for future connections or tie-ins shall be left unburied and uncovered until the Contractor's PSM measures and records the as-built information.

    a. All as-built and inspector information is to be made available to the Engineer on a daily basis for inclusion in the M-D WASD records.

4. Restrained pipe, end line valves, thrust blocks shall be left uncovered for the last complete length. Inline valves and tees shall be left exposed for 1 length on both sides plus the face end. Measure and record the elevation, horizontal and vertical alignment, and the inclination for these items.
5. For all projects, the Contractor's PSM shall maintain exact and extensive records of any deviations from Drawings and Specifications. These records shall be satisfactory to the Engineer, whose decision shall be final, and sufficient to allow the production of accurate as built Plans which correctly and completely portray the work as constructed.

6. For all projects, the Contractor's PSM shall record data as follows during the entirety of construction.

    a. For facility (e.g. a water or sewage plant, pumping station, or similar site, if so designated by M-D WASD) projects, record as-built dimensions and elevations every twenty-five feet (25') or portion thereof along pipeline and at every abrupt change in direction of the new line.
    b. For pipeline projects, constructed in the public right-of-way, record dimensions and elevations every one hundred feet or portion thereof along the pipeline and at every horizontal and vertical change in direction.
    c. In all cases, record locations and elevations for each valve, fitting, service line, fire hydrant, water sampling point, utility poles adjacent to the proposed line, overhead wires crossing the ditch line (approximate height above grade) and other appurtenances along the pipeline.
    d. The identity, dimensions, location, and elevation of any existing utility crossing the proposed line and so immediately adjacent to the new line as to be exposed by the excavation, shall also be

recorded. Locate, excavate, expose, and record the same data for any utility shown in the plans whose proximity to the proposed pipeline could affect the certification requirements of the new installation. Note that in instances of a very wide ditch due to ground conditions, the recording of data for adjacent, paralleling utilities shall only be required for lines which come within three feet of the outside of the pipe being installed, unless otherwise ordered by the Engineer who's decision shall be final.

e. Without exception, for all thrust blocks, the top elevation, outer dimension, thickness of the block, length and location of any sheet piling, if used, shall be recorded by the Contractor's PSM.

f. Specific locations and elevation of equipment, the buildings and miscellaneous items installed inside them shall be recorded as applicable and as required by the Engineer.

g. Without exception, where the substitution of another piece of equipment for that shown on the Plans has been allowed, the footprint, clearance, and elevation dimensions shall be recorded by the Contractor's PSM and these changes shall be accurately and thoroughly portrayed on the as-built plans.

h. Contractor's Licensed Surveyor shall prepare from the field data, as-built record drawings showing correctly, completely, and accurately the installation, embracing all changes and deviations made during construction, including all construction variances, to reflect the work as it was constructed.

i. Record Drawings shall be prepared as specified hereinafter.

j. Record Drawings and five (5) copies shall be signed and sealed by the Surveyor and shall be submitted to the Department for the Engineer's review within ten (10) calendar days following the completion date of successful pressure testing of all mains and appurtenances under this Contract.

k. If the Engineer determines that the Drawings are not acceptable, they will be returned to the Contractor with a cover letter noting the deficiencies and/or reasons for the disapproval. Contractor shall have ten (10) calendar days to correct all exceptions taken by the Engineer and resubmit as-built record drawings to the Engineer for final acceptance.

1.05 MECHANICAL, STRUCTURAL AND ELECTRICAL AS-BUILT RECORDS

A. The mechanical, structural and electrical information on as-builts for Pump Stations and Plant work shall be reviewed and signed and sealed by a Florida Registered Professional Engineer when designated as the responsible party for the corresponding portion of the as-builts.

B. The Engineer shall verify that all mechanical, structural and electrical information on the as-built the work was constructed as designed on the Design Plans. Any deviation shall be noted and approved by the Department.

C. Capital Improvement Projects contracted by the Department shall be certified by

the Construction Manager or Engineer of Record that the work was constructed as designed on the Design Plans with any deviation shall be noted and approved by the Department.

1.06 PROPERTY BOUNDARIES

A. The Florida Licensed Professional Surveyor and Mapper shall establish and maintain throughout the construction the property boundaries of pump stations and easements. The surveyor shall verify that the work of the project does not encroach into adjacent (abutting) property. Property corners lost during construction shall be reset at the first opportunity to ensure that the work is done within the designated limits.

B. The as-builts for pump stations or other Water and Sewer Department above ground facilities in an easement or designated property shall show all property corners, setbacks and dimensions of the structure and appurtenances. All information required of a boundary survey shall be contained on the as-built plans. A boundary survey signed and sealed by a PSM shall be a part of the as-built plans.

1.07 DRAWINGS

A. During the life of the Contract, maintain records of all deviations from the Plans and Specifications and prepare therefrom As-Built Record Drawings showing correctly and accurately all changes and deviations made during construction to reflect the work as it was actually constructed. It is the responsibility of the Contractor to check the As-Built Record Drawings for errors and omissions prior to submittal to the Department and certify in writing that the As-Built Record Drawings are correct and accurate, including the actual location of all piping, exposed and internal piping, and electrical/signal conduits in or below the concrete floor. Indicate the size, depth and voltage in each conduit.

B. Legibly Mark To Record Actual Construction: All data as previously specified for all installations by the Contractor’s PSM. For on-site structures and facilities work the Contractor’s Florida Registered Land Surveyor shall record:

1. Depths of various elements of foundation in relation to finish first floor and datum plane.
2. All exposed and underground piping and ductwork with elevations and dimensions and locations of valves, pull boxes, etc. Changes in location. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent reference points, plant survey grids, property lines and similar.
3. Location of internal utilities and appurtenances concealed in the construction shall be referenced to visible and accessible features of the structure. Air conditioning ducts with locations of dampers, access doors, fans and other items needing periodic maintenance.
4. Field changes in dimensions and details.
5. Changes made by Engineer's written instructions or by Change Order.

6. Details not on original Contract Drawings.
7. Equipment and piping relocations.
8. Major architectural and structural changes in structures, including tanks.
9. Architectural schedule changes according to Contractor's record and shop drawings.
10. Record Drawings shall be prepared as specified hereinafter.

C. Specifications and Addenda: Legibly mark each section to record:

1. Manufacturer, trade name, catalog number and Supplier of each product and item of equipment actually installed.
2. Changes made by Engineer's written instructions or by Change Order.

D. Approved Shop Drawings: Provide record copies for system diagrams and drawings together with each element of process equipment, piping, electrical system and instrumentation system.

1.08 SUBMITTALS

A. Accompany submittal with transmittal letter in duplicate, containing:

1. Date
2. Project title and number
3. Contractor's name and address
4. Title and number of each Record Document
5. Signature of Contractor or his authorized representative.

B. Record Drawings with five copies which have been signed and sealed by the surveyor shall be submitted to the M-D WASD for the engineer’s review. Drawings shall conform to recognized drafting standards. As-built drawing shall be submitted on 24-inch by 36-inch bond paper. These materials shall be submitted to the MD-WASD for the Engineer’s review as a prerequisite for payment during the course of construction as previously specified and final, complete sets of documents within ten calendar days following the completion date of successful testing of all mains, equipment and appurtenances under this Contract. Final payment will not be made until the five sets of as-built record drawings (with AutoCAD file) and five sets of prints have been approved and accepted by the Engineer.

1. In cases where a portion of a pipeline system or parts of a process system are put into service, the above conditions shall apply for the in-service portion and monthly payments shall be withheld until the as-built drawings are accepted by the Engineer.
2. As-Built Record Drawings, as prepared by the Contractor’s Florida Licensed Professional Surveyor and Mapper and submitted by the Contractor, shall comply with following criteria and standards:
   a. Title block must show the Contract or Project Title (as applicable); Contract number; MD-WASD ER, PCTS, RPQ numbers; Contractor’s name; Engineer of Record’s name;

Surveyor's name and address; date; location; and where appropriate to the work, size and type (i.e. water main, sanitary gravity main, sanitary force main) of main.

b. Baselines or centerlines must be tied to section corners, monument line and right-of-way lines.

c. Pipeline must be tied to baseline or centerline with stations and offsets.

d. Baselines or centerlines must show bearings or deflection angles, or delta, radius, chord and arc length for curves.

e. Show all horizontal curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

f. Stationing must be the same as shown on construction drawings and must be tied to Section corners, centerline intersections and all other pertinent control points within the Project. All such pertinent points shall have their stationing shown and where there is dual stationing for a point, both stations shall be called out.

g. Indentify all streets by name or number and show stationing at all intersecting streets.

h. Refer to vertical datum plane and identify the location, elevation and source supplying the bench mark used.

i. Tie easement lines to survey baseline or platted centerline and right-of-ways.

j. Show horizontal and vertical locations of all fittings, deflections, or at any significant change of direction, and at a maximum of 100-foot intervals along the pipeline for off-site (e.g. in the public right-of-way) and at maximum 25- foot intervals for on-site (e.g. on a facility such as a pump station or plant work.

k. On all pipe fittings of 36-inch diameter or over, (i.e. tees bends, crosses, wyes, increasers/decreasers, bevels) elevations must be taken at the end and center points to reflect the true elevation and altitude of the fitting.

l. Elevations of natural ground or pavement over the pipeline must be shown at each position where the pipe elevation is shown and at intervening high and low points.

m. Manhole rim and valve box rim elevations must be shown.

n. Show all invert and bottom elevations in manholes and valve vaults or boxes. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the pipe line being constructed.

o. Locations and elevations together with diameter, thickness and material of all casings.

p. Location, top and bottom elevations of all sheeting left in place.

q. Coordinate values used inside plants shall be the local, the City established coordinate systems referenced to the property boundary.

r. State plane coordinate values for all new valves and manholes; on existing valves and manholes at points of connection or closest to the point of connection and the point of connection

itself.

3. Certification: The Contractor shall certify on as-built record drawings all other actual constructed details and information as may be required by the City including but not limited to:

   a. Pipeline must be identified by type of pipe material, manufacturer, type of joint and type of joint restraint.
   b. Valves shall be identified by size, type, end condition; and n valves 16-inch or larger, the manufacturer's name and number of turns required to open or close the valve.
   c. Show calculated pipeline percent of grade between manholes of gravity systems.
   d. Types and sizes of sheeting and piling together with measured and complete; location, dimensional, , and elevation data on any pile caps, tie backs, anchors, whalers or other appurtenant structures left in place.

C. Digital Records: The City requires the submittal of as-built drawings in AutoCAD for Windows format and in PDF format. Graphical information contained on magnetic media shall be the same as provided on plan sheets. Digital Records shall be delivered to the City Project Manager containing a list of all files and data being provided. The AutoCAD file shall be compatible with the Department system and capable of being uploaded without external reference files.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 78 40 (01725)

PROJECT AS-BUILT/RECORD DRAWINGS

PART 1 GENERAL

1.01 SCOPE

A. This Section shall serve to set requirements for As-Built/Record Drawings submitted to Miami-Dade Water and Sewer Department (Department").

B. As-Built/Record Drawings shall be submitted prior to placing any mains in service. The approved Final As-Built/Record Drawings are required for Substantial Completion and Conveyance of new water or sewer infrastructure. The infrastructure shall have As-Built/Record Drawings in the format and information specified herein, as recorded by a Professional Surveyor and Mapper (PSM) and prepared in accordance with these guidelines as part of the construction and inspection process.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. The work shall proceed in accordance with the following specification sections, bound herein:

1. Section 01 31 19.13 (01150) – “Preconstruction Conference”
2. Section 01 42 16 (01005) – “Defined Terms”
3. Section 01 71 23 (01031) – “Grades, Lines and Levels”
4. Section 01 77 00 (01700) – “Contract Closeout”

1.03 GENERAL

A. The Contractor shall retain the services of a Florida Registered Professional Surveyor and Mapper as a prerequisite to receiving a Notice To Proceed (NTP).

1. Prior to receiving the NTP the Contractor shall provide a letter from the PSM indicating that the Contractor has secured his services to perform all survey work for the duration of the Project, and to prepare final As-built/Record Drawings.
2. Prior to receiving the NTP the Contractor shall provide a copy of the insurance policy declaration page of the surveying company, and the professional Liability insurance coverage.
3. The Surveyor shall attend the Preconstruction Conference. It is the Contractor’s responsibility to have the services of the PSM by the Preconstruction Conference and the PSM in attendance.
4. Donation projects require the Survey Company or PSM to carry professional liability insurance coverage. A copy of the insurance policy including the declaration page shall be provided with the Final As-Built/Record Drawings.

B. The Florida Registered PSM shall maintain records of the installation, including all deviations from Plans and Specifications, and for the purposes of preparing and submitting to the Department an As-Built/Record Drawing in compliance with:

1. Florida Statutes Chapter 472.027.
2. Florida Administrative Code Chapter 5J-17.
3. As further required by the Contract Documents.

1.04 AS-BUILT SUBMITTAL PACKAGE

A. The Final As-Built/Record Drawing shall be submitted by the Contractor prior to performing the pressure test of the main to be placed into service. The Department is required to have as-built record documentation of all mains in operation.

B. Donation Projects As-Built Package-Submittal Prior To Pressure Testing and Certification

1. A set of signed and sealed As-Built/Record Drawings (DWFX or PDF file), signed and sealed field book information, electronic field raw data shall be submitted using the applicable Department's system.
2. As-Built/Record Drawings in digital format DWG.
3. Bill of Materials, Bill of Sale Sketch (completed and signed by the Contractor).
4. Easement(s) legal description and sketch (signed by the owner if part of the project). All surveys for right-of-ways, easements, properties, topographical, boundaries and other special purposes.

C. Monthly submittals (for WASD contract projects)

1. A set of signed and sealed As-Built/Record Drawings (DWFX or PDF file), signed and sealed field book information, electronic field raw data shall be submitted using the applicable Department's system.
2. As-Built/Record Drawings in digital format DWG.
3. Final As-Built/Record Drawings shall be submitted as a prerequisite for the last progress payment.
4. Easement(s) legal description and sketch (signed by the owner if part of the project). All surveys for right-of-ways, easements, properties, topographical, boundaries and other special purposes.

D. **Final submittal** shall consist of corrected As-Built/Record Drawings and Documents in digital format (DWG and PDF files), to be submitted using the applicable Department's system and the following sets of signed and sealed hard copies:

1. Two sets for water main projects,
2. Two sets for gravity and force main sewer projects,
3. For pump stations:
    a. Five sets for donation projects.

b. Three sets for contracts.

4. PSM's signed and sealed copy of the Field Book.

5. For donations, a copy of the insurance policy of the PSM, and the surveying company, including the declaration page.

E. As-Built/Record Drawings signed and sealed by the Florida Registered Professional Surveyor and Mapper and/or Engineer of Record or designated Florida Registered Professional Engineer must comply with format requirements.

F. Platted Lots Requirement

1. In lieu of recorded plats, 1 copy of a tentative plat signed by a representative of the Miami-Dade County, Department of Transportation and Public Works, Plats Division may be acceptable for As-Built/Record purposes. The Plats Division representative shall attest that the lot and block numbers, street names, easements, and other pertinent data shown are as will be recorded in the plat's final form. In this case, the submitter is responsible to provide a copy of the recorded plat to the Department's New Business office before any water meters are set on the Project.

1.05 AS-BUILT/RECORD DRAWINGS FORMAT AND GENERAL SUBMITTAL REQUIREMENTS

A. Size shall be 24" X 36".

1. Preferred scales are 1"=20' for contracts and 1"=40' for donations horizontally, and 1"=2' for contracts and 1"=4' for donations vertically. Other scales may be permitted but must be approved by the Department prior to preparation of the drawings.

2. Provide separate As-Built/Record Drawings and easements for water and sewer conveyances. Where water and sewer are shown on the sewer As-Built/Record Drawings, print dash the water on the sewer As-Built/Record Drawings and show only sewer As-Built information. The same applies for the water As-Built/Record Drawings.

3. Any deviations from the design plans must be approved by the Department.

B. Quality of As-Built/Record Drawings

1. To ensure that As-Built/Record Drawings may serve their intended purposes, they shall be prepared with consideration for quality. The Inspector and As-Built Reviewer will consider the following elements to ensure the quality of As-Built/Record Drawings:

a. Accuracy: The Contractor is required to have a survey crew record the field information as necessary when there is underground pipe installation. The Florida Registered Professional Surveyor and Mapper shall be responsible for providing measurements in accordance with the standard of practice established in Chapter 5J-17 of the Florida Administrative Code, pursuant to Section 427.027, Florida Statutes. The approved final As-Built/Record Drawing will be used as part of the Department's GIS and Record System. In addition, the horizontal

accuracy shall not exceed 1 foot in 7,500 feet, a commonly value accepted for suburban areas. The elevations shall be based on a closed level between two-benchmarks and shall not exceed the calculated value of a closure in feet of plus or minus 0.05 feet times the square root of the distance in miles.

b. Appearance: As-Built/Record Drawing shall be prepared in a professional manner consistent with common drafting standards for layout, lettering and line work.

c. Understandability: As-Built information shall be portrayed in a manner that is readily understandable by someone not familiar with the specific job.

d. Clarity: Preparer shall endeavor to present As-Built information clearly without "cluttering" the drawing. Do not include or show trees, shrubs, traffic lights or signs, landscaping, etc.

1.06 CERTIFICATION

A. As-Built/Record Drawings shall include a signed, sealed and dated certification statement by the responsible Florida Registered Professional Surveyor and Mapper, that all measurements were recorded under his direction and that they are accurate.

B. Final As-Built/Record Drawings that contain electrical, mechanical or structural work (pump stations, sewage flow meters, etc.), shall be signed and sealed by the Engineer of Record to indicate As-Built conditions.

C. Certifier shall be fully responsible for the accuracy of the As-Built/Record Drawings. As-Built/Record Drawings shall not contain any statement that the information was obtained from another party other than a Professional Surveyor and Mapper under his direction (e.g. a statement such as "As-Built information provided by Contractor" shall not be permitted).

D. The Contractor shall certify on the As-Built/Record Drawings that the As-Built/Record Drawings are correct and accurately depict what was constructed in the field, in addition that all As-Built field information submitted to the EOR or designated Florida Registered Professional Engineer and/or PSM reflects actual field As-Built project conditions, such as:

1. Valves must be identified by size, type, and end condition. On valves 16-inch or larger, the manufacturer’s name and number of turns required to open or close the valve.

2. Pipeline must be identified by type of pipe material, manufacturer, type of joint and type of joint restraint.

3. Types and sizes of sheeting and piling together with location, dimensional, and elevation data on any pile caps, tie backs, anchors, whalers or other appurtenant structures left in place.

4. External wiring has been terminated inside the panel at the designated “terminal boxes” in accordance with the approved electrical schematic and/or shop drawings.

5. The electrical control panel has been installed and its components match approved shop drawings and are in compliance with the Department's Standards and Specifications.

6. The electrical power and control diagrams are current and reflect all approved plans and/or field modifications made, if any.

7. The electrical control panel and associated electrical equipment are safe to energize and operate.

E. The electrical control panel manufacturer shall certify that:

1. The installed control panel has been inspected at the job site.

2. The control panel and its components match approved shop drawings and are in compliance with project's plans and specifications.

3. The control panel and its components have not been modified, changed or altered in any way, shape or form as to void the Underwriter Laboratory (UL) listing.

4. The electrical control panel and its components are safe to energize and operate

1.07 QUALITY ASSURANCE

A. Contractor's Responsibility

1. As-Built/Record Drawing preparation and submittal shall be the responsibility of the Contractor. The final As-Built/Record Drawings shall be completed and submitted to the Department prior to pressure testing, pending to show only portions of the Project not authorized to be done before certification of the system, such as interconnections, abandonments, cut and plugs, etc.; those activities shall be reflected on the final As-Built/Record Drawing and resubmitted within ten (10) County calendar days after a successful test. Testing will not be considered complete until As-Built/Record Drawings, field book data and other record documents are submitted and approved by the Department.

2. As-Built/Record Drawings shall be checked by the Contractor for errors and omissions prior to submittal to the Department.

3. For Donation Projects: A Bill of Materials (on Department form) shall also be certified as correct by signature and presented at the time of As-Built submission. Quantities shown on the Bill of Materials shall match installed and As-Built quantities, not quantities proposed, bid or bought nor scaled distances or quantities.

B. Professional Surveyor and Mapper Responsibility

1. The PSM shall be responsible for all locations, measurements and associated information on the As-Built/Record Drawings.

2. Infrastructure being shown on As-Built/Record Drawings shall have been located under the direction of a Florida Registered Professional Surveyor and Mapper.

3. As-Built/Record Drawings shall meet the requirements established in these specifications.

1.08 PHASING

A. Phasing of projects must be approved by the Department and such approval communicated to the Inspections Unit. Where phasing is approved the following additional requirements for As-Built/Record Drawings shall apply:

1. The phase number must appear prominently on each sheet.

2. A prominent phase line shall be drawn at the junctures of the submitted phase with any previous or subsequent phases. The phase line shall be labeled and the phase numbers on either side of it identified.

3. Work in previous or subsequent phases shall be "hatched" out or dashed in plan and profile and labeled "Not a Part" to clearly eliminate it from the As-Built/Record Drawings.

4. Clearly show what is part of the present phase and what is part of previous or subsequent phases at the tie-in points or phase lines. Make certain that this matches what was previously submitted with any earlier phases.

5. Unless otherwise authorized, phases shall end at a valve for water and force mains, and at a manhole for gravity sewers.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 GENERAL

A. If construction drawings are used to create the As-Built/Record Drawings, all "proposed" construction related information such as “equal to”, “typical”, “approximately”, “shall”, etc. shall be removed from As-Built/Record Drawings, leaving only "As-Built" information reflected on the drawing. Do not remove any information on materials installed. The construction drawings need to be adjusted accordingly to reflect constructed as-built information.

B. Site location sketch shall be provided showing the Project site and surrounding area with all streets clearly named, its own north arrow and a readable scale. The section, township and range shall also be provided therein.

C. Provide separate water and sewer profiles.

D. When the main crosses a utility or structure, the two points providing the clearance shall be identified, measured and recorded. This shall apply to all utilities (water, sewer, sewer laterals, water services, gas, electric, storm, telecommunication, duct banks, etc.).

E. All mains shall be stationed, and all facilities and infrastructure labeled. As-Built/Record Drawings shall show stations for all services. As-Built lengths and distances for service runs shall also be given.

F. Stations shall run along the baseline.

G. For water mains, force mains and gravity sewers use one continuous stationing system.

H. Where different stationing systems cross, show the equation station.

I. Label with station and offset all valves, fittings, services, outlets, manholes, deflection points and other components in the line. The labels, stations and offsets shall coincide, plan and profile.

3.02 REQUIRED INFORMATION AND MEASUREMENTS

A. Set-Up Verification

1. The Contractor's Florida Registered Professional Surveyor and Mapper is required to recover the design baseline and verify the elevations and coordinates on a regular basis as needed.

2. The Florida Registered Professional Surveyor and Mapper shall establish and maintain throughout the construction the property boundaries and easements of pump stations and any other Department's facilities and infrastructure. The PSM shall verify that the work of the Project does not encroach into adjacent (abutting) property. Property corners lost during construction shall be reset at the first opportunity to ensure that the work is done within the designated limits. The PSM shall note on As-Built/Record Drawings any Department approved encroachments into pump station site (fencing, driveways, etc.).

3. The Contractor is required to have a level instrument setup next to the construction site in order to control the vertical alignment of the pipe installation prior to trench backfilling. The level shall be setup daily for use by the PSM, Contractor's foreman and Department Engineer/Inspector.

4. The Contractor is required to have a survey crew record the field information on a daily basis when there is underground facilities and infrastructure installation. The survey crew shall be on-site as needed to record and verify the information before it is covered. Any underground construction work that does not have the information recorded by a survey crew will be stopped by the Department Engineer/Inspector. The Engineer/Inspector has the authority to order re-excavation of work that was covered without accurate survey measurements.

B. Field Book Information

1. The Florida Registered Professional Surveyor and Mapper is required to have his crews make daily visits to the Project site during underground pipe installation work to perform field measurements of the Contractor's daily installations. This information shall be recorded in field books. Copies of the field notes are required to be provided to the Construction Manager/Inspector

on a monthly basis. The PSM's field notes shall be submitted to the Department along with final As-Built/Record Drawings (signed and sealed) as a condition of conveyance (for donation projects), or monthly basis as a condition of payment and at substantial completion (for contract projects) before applying for final payment. Electronic field raw data is acceptable.

C. As-Built/Record Drawings Content Requirements and Procedures

1. The following shall be made a part of any As-Built submittal for water or sewer, where applicable:

a. Project name, Project identification number and the words "As-Built/Record Water" or "Record Drawing Water" or "As-Built/Record Sewer" or "Record Drawing Sewer", all prominently displayed. PMS's or Engineer's name, company, address, phone number and certification statement shall also be displayed.

b. All applicable permit numbers for the Project shall be shown on the cover sheet.

c. Graphic and numeric scale, north arrow and any symbol legend needed.

d. All involved streets shown with centerlines, right-of-way lines, widths and names, with matching plat, if applicable, subdivision name, phase line and number. (Phasing to be nearest valve and manhole in limits of phase area). Show station at all intersecting streets.

e. All involved lots and blocks shown and correctly designated (to match plat).

f. All control lines identified (i.e. centerline, section line, monument line, property line, etc.). Identify all streets by name or number.

g. Baseline shall be tied to centerlines, boundary lines, section corners, or to monument lines or to right-of-way lines. Baselines must show bearings or deflection angles, or delta, radius, chord and arc length for curves.

h. Pipeline shall be tied to a baseline that is easily identified on the existing or proposed right-of-way. Baseline shall not be on top of the main except for gravity sewers installed on centerlines.

i. Show all horizontal curve data, including point of curvature (PC) and point of tangency (PT) stations or radial bearing.

j. Stationing shall proceed from south to north and/or from west to east. Stationing shall be the same as shown on construction drawings and must be tied to section corners, centerline intersections and all other pertinent control points within the Project. All such pertinent points shall have their stationing shown and where there is dual stationing for a point, both stations shall be called out.

k. Horizontal Control

1) The PSM shall show on the As-Built/Record Drawings the Florida State Plane Coordinate (current readjustment - NAD 83,

FLA East Zone 901) with at least two physically located horizontal control points within the Project limits.

2) For As-Built/Record Drawings within Department facilities with relative coordinates, a coordinate conversion equation needs to be included on every sheet.

l. Vertical Control

1) As-Built/Record Drawing shall use the same datum as per approved design plans.

2) Nationwide, surveys and As-Built/Record Drawings are in the process of conversion to NAVD 88 from the NGVD 1929. The Department will accept NAVD 88 datum with a conversion factor to NGVD 1929 on each page.

3) For projects using City of Miami datum provide a conversion factor on each page to NGVD 1929 datum.

m. Easements

1) Easements, if any, shall be clearly shown with size, coordinates for each corner and tied to the property line. The easements shall be separate for water, sewer, force main and pump stations.

2) Existing easements with Official Record Book (ORB) information must be shown.

3) Easements are required for any infrastructure not in the public right-of-way. An easement may also be required for a main in the public right of way if there is insufficient side clearance to the right-of-way line to permit maintenance of the pipeline (usually 6' for water and 7.5' for force mains and gravity sewer mains on each side measured from the center of the pipe). For pipelines larger than 16-inches in diameter the easement size shall be determined by the Department.

4) Easement lines shall be tied to the centerline of the main.

5) Show easement released with Miami Dade County Clerk of the Court Official Record Book (ORB) and page.

n. Tie-in Points

1) All tie-in points, water or sewer shall be tied to the baseline.

2) In instances where this is impractical such as for service installations, the tie-in location may be referenced to a known Department facility such as a valve or manhole. This facility must be fully identified with atlas page, Department As-Built/Record Drawing number and page and its designation and station as given therein. Approval for this method of location shall be secured with the As-Built Reviewer/Inspector.

3) All locations for future connections or tie-ins shall be left unburied and uncovered until the Contractor’s Florida

Registered Professional Surveyor and Mapper measures and records the As-Built information.

4) Clearly show and label what is new and what is existing at the tie-in points with the WASD As-Built/Record Drawing number identified on the existing main.

o. The ends of all services and laterals shall be fully located by reference to the main and the nearest property line(s).

p. Show all outlets, stub-outs, sewer lateral, water service and any other relevant information. Identify the size, material, length, direction and elevation (top of pipe for water and force main, invert for gravity sewer).

q. On all pipe fittings of 36-inches diameter or larger, including tees, bends, crosses, wyes and bevels, station and elevation shall be taken at the end and center points to reflect the true elevation and orientation of the fitting.

r. Elevations of natural ground or pavement over pipelines shall be shown at each position where the pipe elevation is shown at least every 100 feet on profile view.

s. Show profile view of the main pipeline installation on the same sheet as the plan view. Stationing on both views shall be aligned to facilitate As-Built review.

t. Manhole rim and valve box rim elevations shall be shown.

u. Show all invert and bottom elevations in manholes and valve vaults or boxes.

v. Show all invert and bottom elevations together with pipe size, and where it can be determined, pipe material, for existing structures having pipes which cross the pipe line being constructed within 250 feet of point of crossing.

w. Location, elevation, material and size of all casings shall be shown. Launching and receiving pits location and dimensions shall be shown in case of jack and boring or micro tunneling used for casing installation.

x. Types, sizes of sheeting and piling together with measured and complete locations with dimensions, top and bottom elevations of all sheeting and pile caps, tie backs, anchors, whalers or other appurtenant structures including sheeting left in-place, shall be shown.

y. Where service is not at a right angle (90 degrees) to main line, tie service with length of offset to nearest property line.

z. For Horizontal Directional Drilling installations, in addition to the applicable items already mentioned on this section, As-Built/Record Drawings shall include:

1) Equipment used.

2) Angles at entry and exit and radius.

3) Bore path report to include detection method used, location for both entry and exit referenced to a permanent structure,

information of the company collecting the data, such as company name, address, date, staff information who collected the data.

4) The Department shall be provided with As-Built/Record Drawing for any failed bore path.

aa. Provide State Plane Coordinate values and elevations for all visible features such as valves, fittings, service lines, manholes, fire hydrants, water sampling points, water meters, cleanouts and backflow preventers, utility poles, adjacent to the main, overhead wires crossing the main and other appurtenances along the main. Also provide State Plane Coordinate values for existing valves and manholes at points of connection or closest to the point of connection and the point of connection itself.

bb. Lines that are abandoned in place, placed out of service or removed shall be clearly identified (dashed and bold line type) on the As-Built/Record Drawings to include cut and plug locations, pipe material and existing As-Built location. Include the existing As-Built/Record Drawing numbers. State whether cut and plug was performed by Department forces.

cc. Include a statement showing work performed by the Contractor under Department's licensed operator supervision.

dd. Mechanical restraints shall be identified on the As-Built/Record Drawing. The restraint system used shall be identified (gland restrained, joint restrained or gasket restrained). If thrust blocks are constructed, the top elevation, outer dimension, thickness of the block, length and location of any sheet piling, if used, shall be recorded by the Contractor's PSM.

ee. Large diameter concrete transmission mains 42-inches and larger shall show each pipe joint with station and pipe length.

ff. Restrained pipe, end line valves, thrust blocks shall be left uncovered for the last complete length. In line valves and tees shall be left exposed for one length on both sides plus the face end. Measure and record the elevation, horizontal and vertical alignment, and inclination for these items.

gg. For pipeline projects, provide dimensions and elevations of ground and top of pipe every one-hundred feet maximum, or portion thereof along the pipeline, at every significant change on ground elevation, at every horizontal and vertical change in direction and at all fittings, with stations.

hh. If an asset is authorized to be reused, clearly show that asset, such as a fire hydrant, is being reused.

ii. Pipeline must be identified by type of pipe material, manufacturer, type of joint and type of joint restraint.

jj. The identity, dimension, location and elevation of any existing utilities crossing the proposed line and so immediately adjacent to the new line

as to be exposed by the excavation shall also be recorded. Locate, excavate, expose and record the same data for any utility shown in the plans whose proximity to the proposed pipeline could affect the certification requirements of the new installation. Note that in instances of a very wide ditch due to ground conditions the recording of data for adjacent, paralleling, utilities shall only be required for lines which come within three feet of the outside (but not less than the minimum required per FAC 62-555.314) of the pipe being installed unless otherwise ordered by the Department whose decision shall be final.

kk. Specific location and elevation of equipment, buildings and miscellaneous items installed inside the buildings shall be recorded as applicable and as required by the Department.

ll. Without exception, where the substitution of a piece of equipment for that shown on the Plans has been allowed, the footprint, clearance and elevation dimensions shall be recorded by the Contractor's PSM and these changes shall be accurately and thoroughly portrayed on the As-Built/Record Drawings.

2. As-Built/Record Drawings for **water and sewer force mains** shall additionally include the following:

a. Plan view showing size, material, offset of main, deflections (if any), stations and offsets of services, hydrants and fittings at the main; and at main, deflections (if any) and the end of the service line.

b. Profile showing ground and top of pipe elevation every 100 feet, maximum, and at any change in grade (with corresponding station) and at every fitting. Show size and material of pipe, all fittings and extend of restrained pipe with stations. Stationing system shall be the same as that used in the plan view.

c. Distances from main to all valves, fire hydrants and meter boxes shall be shown. Tie hydrants to right-of-way. In established areas, the PSM shall run-out right-of-way lines.

d. All "Assembly Detail" shall be provided for all turbo meter installations and for all meters greater than four (4) inches.

e. Label water service as either double, single, irrigation, and so on, based on type of service, including diameter and material.

f. When meter banks are used, show typical detail with size of service line, material and type of services.

g. Location of all air release valves and top of pipe elevation, identifying if the air release valves are automatic or manual.

h. Valves must be identified by size, type, and end condition. Manufacturer's name and number of turns required to open or close the valve shall be provided for valves 16 inch or larger.

3. Gravity sewer As-Built/Record Drawings shall additionally include the following:

a. Plan showing manhole numbers and stations, size and material of pipe,

manhole to manhole length and slope in percentage. The size, material, station and lengths of laterals shall also be shown. Stationing shall be in accordance with the approved permit Plans.

b. Profile showing manhole numbers (as per plan), rim elevations, invert elevations in and out of each manhole with directions, length and slope of line. Pipes with a slope less than the minimum recommended by RER (formerly Department of Environmental Resource Management) minimum for a particular size of pipe shall not be accepted.

c. Stations and offsets of all wyes and tees for laterals and location of cleanouts with distance to property line.

d. Connections to existing sewer collection systems with flow direction shown.

e. Show profile for sewer laterals crossing utilities, with invert elevations at main, at crossings, at change in direction and at clean out, including slope, clearance at crossing and station.

f. When connecting a new main or lateral to an existing main, the As-Built/Record Drawing shall show distance and invert elevations of downstream and upstream existing manholes.

4. The following shall also be included on As-Built/Record Drawings for sewer pump stations and other infrastructure:

a. A complete topographic and boundary survey for the pump station and/or other facilities signed and sealed by the Florida Registered Professional Surveyor and Mapper as part of the As-Built/Record Drawings. All information required of a boundary survey, such as property corners, setbacks, dimensions of the structure and appurtenances, etc. shall be contained on the As-Built/Record Drawings to include the legal description of pump station site and/or other facilities, easements and rights-of-way abutting the pump station site and location of all surface facilities recorded by a PSM. All utilities within pump station property shall be properly shown, along with their associated elevation and clearance.

b. Horizontal and vertical locations of all fittings, deflections, or at any significant change of direction, and at a maximum 25- foot intervals for on-site (e.g. on a facility such as a pump station or plant work).

c. Plan and vertical cross-section of the station showing and identifying the piping and mechanical layout. Show elevations for top of wet and dry wells, bottom of wet well, pipe inverts, finish floor elevation, etc.

d. FEMA flood zone and elevation shall be shown on the cover sheet.

e. Electrical As-Built/Record Drawing control and riser/one-line power schematic diagrams, RTU wiring diagram and all other elevation and any other electrical details.

f. Engineering Report as to the pump manufacturer, size, capacity (TDH), peak design capacity (in GPM) and Bill of Materials (for donation projects).

g. The mechanical, structural and electrical record drawings are to be prepared by the Engineer of Record or a designated Florida Registered Professional Engineer, each sheet of the record drawings must be signed and sealed by the Engineer of Record or a designated Florida Registered Professional Engineer. The cover sheet is to be signed and sealed by the Engineer of Record or a designated Florida Registered Professional Engineer and shall include the following statement:

1) "I certify that these record drawings have been reviewed by me or by individual(s) under my direct supervision and that these drawings incorporate the information contained in the certified As-Built/Record Drawings. To the best of my knowledge and belief these record drawings substantially reflect the sanitary sewer pump station and/or other infrastructure as constructed, and as depicted on the permit plans including any Department approved deviations, if any. The accuracy of these record drawings is reliant on the accuracy applied by the PSM that prepared the certified As-Built/Record Drawings, which was [include the PSM's name, business name, PSM number, address and telephone number]. The PSM has certified to me in writing, that the As-Built location information of the sanitary sewer pump station and/or other infrastructure conforms to the standards of practice for land surveying, Chapter 5J-17 of the Florida Administrative Code."

3.03 DEPARTMENT PROCESSING

A. The Department will require 10 County calendar days to perform the As-Built review.

B. As-Built/Record Drawings will be initially reviewed, commented and/or recommended to be approved, from construction perspective, by the responsible Field Inspector, who shall verify that they are an accurate representation of the work as installed and that the job as shown is complete and in accordance with the permitted plans.

C. Following the Field Inspector's review, As-Built/Record Drawings will be reviewed in depth by the As-Built Reviewer to ensure compliance with these specifications. The Reviewer will also check the complete package which for donation projects shall include the Bill of Materials.

D. The complete submittal package as defined above shall be delivered using the applicable Department's system.

E. Cause for Non-Review

1. If review by the As-Built Reviewers reveals excessive errors or omissions, the As-Built/Record Drawings shall be deemed "non reviewable". As-Built/Record Drawings containing excessive errors or omissions shall include those with omission of major sections of the installation, water and sewer As-Built/Record Drawings on same sheet, those lacking large amounts of information and other

rrors or omissions that are considered excessive in the opinion of the As-Built Reviewer.

2. In cases when an As-Built/Record Drawing is considered "non-reviewable", it shall be marked "Not Reviewable", the reviewer shall note comments regarding obvious problem(s) and shall be returned to submitter. Such As-Built/Record Drawings will not be considered as having been reviewed for the purposes of Sub-section F, Punch List, below.

F. Punch List (for donation projects only)

1. Punch List items may be generated from the Department initial review. Successive reviews are solely for the purpose of ensuring that original punch list items are completely and correctly done to obtain a final As-Built/Record Drawing acceptable to the Department.

2. Successive punch list items may only be added to correct a problem resulting from submitter's efforts to comply with the original punch list. The Department will prevent adding new punch list item(s). Submitter shall be required to make these successive changes.

3. In the case of a major oversight on the part of the As-Built Reviewer, punch list items may be added to the list or requested to the submitter after the valid time for such items. The Department requires that all corrections be made as a condition of accepting the final As-Built/Record Drawings.

G. Acquisition and Resubmittal

1. After notification from the Department, DWFX and/or PDF file with markups along with the As-Built punch list (donation projects only) can be obtained from the applicable Department’s System.

2. After making the corrections requested on the As-Built/Record Drawing set and punch list, upload the revised package to the applicable Department’s System. On contracts, contractor shall resubmit corrected As-Built/Record Drawings to the Department within 10 County calendar days for contracts

3. The Department will require 10 County calendar days to perform the As-Built/Record Drawing review.

H. Disputes or Interpretation

1. Resolution of disputes and interpretation of these requirements is the responsibility of the As-Built Reviewer. Submitting parties are urged to work with him to resolve any problems of this nature.

2. Where necessary, the submitting party may request a hearing with the Department’s PSM in matters of dispute or interpretation. The Department’s PSM's decisions shall be final.

END OF SECTION

SECTION 01730

OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 SCOPE OF WORK:

A. Prepare Operating and Maintenance (O & M) Manual covering all equipments and systems provided under this project.

B. Instruct Department's personnel in the operation of equipment and maintenance provided under this project.

C. This Section covers the services of the manufacturer's representatives and special coordinating services required of the Contractor that shall apply during construction, facilities startup, and training of the Department's personnel for facilities operation.

D. The Contractor shall inform all subcontractors and manufacturers of the requirements herein and include the following services in his costs for the work. Where a minimum amount of time is stated in the Technical Specifications for manufacturer's services, any additional time required to perform the specified services shall be at no additional cost to the Department.

1.02 FORM, FORMAT AND SUBMITTALS CONTENTS:

A. Operating and Maintenance manuals will be used for use by Miami-Dade Water and Sewer Department personnel in the operation and maintenance of the various systems.

B. The Department shall be furnished with one set of any special tools required for servicing for each type of equipment actually furnished.

C. Prepare data in the form of an instructional manual for use by Department's personnel.

D. Format:

1) Size: 8½ in. x 11 in.
2) Paper: 20-pound minimum, white, for typed pages.
3) Text: Manufacturer's printed data or neatly typewritten.
4) Drawings:
   (a) Provide reinforced punched binder tab, bind in with text.
   (b) Fold larger drawings to the size of the text paper.
5) Provide fly-leaf for each separate product, or each piece of operating equipment.
   (a) Provide typed description of product, and major component parts of equipment.
   (b) Provide indexed tabs.
6) Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:
   (a) Title of Project.
   (b) Identify of separate structure as applicable.
   (c) Identity of general subject matter covered in the manual.

E. Binders:

1) Commercial quality three-ring binders with durable and cleanable plastic covers.
2) Maximum ring size: As required (Minimum 1½-inches).

F. Content of Manual:

1) Neatly typewritten table of contents, arranged in a systematic order.
   (a) Contractor, name of responsible principal, address and telephone number.
   (b) A list of each product required to be included, indexed to the content of the volume.
   (c) List, with each product, the name, address and telephone number of:
      (i) Subcontractor or installer.
      (ii) Maintenance contractor, as appropriate.
      (iii) Identify the area of responsibility of each.
      (iv) Local source of supply for parts and replacement.
   (d) Identify each product by product name and other identifying symbols as set forth in Contract Documents.

G. Product Data:

1) Include only those sheets which are pertinent to the specific product.
2) Annotate each sheet to:
   (a) Clearly identify the specific product or part Installed.
   (b) Clearly identify the data applicable in the installation.
   (c) Delete references to inapplicable information.

H. Drawings:

1) Supplement product data with drawings as necessary to clearly illustrate:
   (a) Relations of component part of equipment and system.
   (b) Control wiring, schematic wiring, and flow diagram.
2) Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
3) Do not use Project Record Documents as maintenance drawings.

I. Written text, as required to supplement product data for the particular installation:

1) Organize in a consistent format under separate headings for different procedures.
2) Provide a logical sequence of instructions for each procedure.

J. Copy of each warranty, bond and service contract issued.

1) Provide information sheet for Department's personnel, give:

   (a) Proper procedures in the event of failure.
   (b) Instances which might affect the validity of warranties or bonds.

1.03 MANUAL FOR EQUIPMENT AND SYSTEMS:

A. Content, for each unit of equipment and system, as appropriate:

1) Description of unit and component parts.

(a) Function, normal operating characteristics, and limiting conditions.
(b) Performance curves, engineering data and tests.
(c) Complete nomenclature and commercial number of all replaceable parts.

2) Operating Procedures:

(a) Start-up, break-in, routine and normal operating instructions.
(b) Regulation, control, stopping, shut-down, and emergency instructions.
(c) Special operating instructions.

3) Maintenance Procedures:

(a) Routine operations.
(b) Guide to "trouble shooting".
(c) Disassembly, repair, and reassembly.
(d) Alignment, adjusting, and checking.

4) Servicing and lubrication schedule.

(a) List of lubricants required.

5) Manufacturer's printed operating and maintenance instructions.

6) Description of sequence of operation by control manufacturer.

7) Original manufacturer's parts list, illustration, as drawings and diagrams required for maintenance.

(a) Predicted life of parts subject to wear.
(b) Items recommended to be stocked as spare parts.

8) List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.

9) Other data as required under pertinent sections of specifications.

B. Prepare and include additional data when the need for such data becomes apparent during instruction of Department's personnel.

C. Additional requirements for operating and maintenance data: The respective sections of Specifications.

1.04 POSTED OPERATING INSTRUCTIONS:

A. General: Operating instructions and diagrams shall be prepared for posting near the equipment. Posted operating instructions shall be photographic or equal non-fading reproductions framed under glass encased in non-discoloring plastic and shall be mounted in location directed. Copies of the posted operating instructions shall also used with the operating and maintenance manuals as a basis in training employees in the operation and maintenance of systems and related equipment installed.

B. Contents: Posted operating instructions shall consist of simplified, consolidated equipment, control and power diagrams graphically representing the entire system and actual equipment installed, including concise written instructions on how to start and stop systems, what settings and conditions are to be observed and what control adjustments are to be made or maintained by the operation.

1.05 MANUFACTURER'S NAMEPLATES:

A. Each major component of equipment to have manufacturer's name, address, model number and rating on a plate securely affixed in a conspicuous place. Nameplate of a distributing agent will not be acceptable in lieu of manufacturer's nameplate.

B. Nameplate shall be die-stamped, engraved, or etched to guarantee long term legibility.

1.06 GUARANTY/WARRANTY:

A. The Contractor shall guarantee that all new equipment has the capacity specified and that it will operate without excess noise or vibration.

B. Contractor shall furnish a written guarantee covering all workmanship and materials for a period of one (1) year, from the date of acceptance. This shall include an agreement to repair or replace, at his expense, all defects that may appear in that time, which in the opinion of the Department, are due to defective workmanship or materials.

C. Copies of factory warranties on all equipment furnished shall be submitted with the above described, written guarantee period, and included in maintenance manuals.

1.07 OPERATION AND MAINTENANCE RESPONSIBILITY:

A. Contractor shall provide all required service and maintenance on all equipment installed under this contract for one (1) year following final acceptance or the beginning of beneficial use by the Department. The starting date of one (1) year service period shall be determined by the Department. Included in the service and maintenance to be provided during this one (1) year period, shall be all required lubrication, adjusting belt tensions, eliminating excessive noise and vibration, correcting all electrical and mechanical faults, recording all permanent installed gauge meter and temperature readings, and other general service items, including the answering of service calls.

B. Services During Construction:

1) General: Competent and experienced technical representatives shall represent the manufacturers of all equipment and systems as many days as may be necessary to resolve assembly or installation problems at the worksite which are attributable to, or associated with, the equipment furnished. This requirement applies to manufacturers of all equipment furnished, whether or not specifically set forth in the Technical Specifications.

2) Manufacturer's Certificate of Proper Installation: Where called for in the Technical Specifications, the manufacturer's representative shall provide a certificate stating that the equipment or system has been installed in accordance with the manufacturer's recommendation and has been inspected by a manufacturer's authorized representative, that it has been serviced with the proper initial lubricants, that applicable safety equipment has been properly installed, and that the proper electrical and mechanical connections have been made.

C. Functional Testing Assistance:

1) Where functional (or run) testing is called for on the Technical Specifications, the manufacturer's representative shall assist with the initial test, which shall include checking for proper rotation, alignment, speed, excessive vibration, and noisy operation. Initial equipment and system adjustment and calibrations shall be performed in the presence of and with the assistance of the manufacturer's representative. The previously specified Manufacturer's Certificate of Proper Installation shall include the statement that proper adjustment have been made and that the equipment or system is ready for plant startup and operation.

2) The Contractor, as applicable to the equipment furnished, shall state in writing that all necessary hydraulic structures, piping systems, and valves have been successfully tested; that all necessary equipment systems and subsystems have been checked for proper installation, started, and successfully tested to indicate that they are all operational; that the systems and subsystems are capable of performing their intended functions; and that the facilities are ready for startup and intended operation.

D. Training of Owner's Personnel

Where called for in the Specifications, the manufacturer's representative shall provide detailed instructions to the Departments personnel for operation and maintenance of the specified equipment. These training services shall include pre-startup classroom and onsite equipment instruction and/or post-startup classroom and onsite equipment instruction, as stated in the Specifications.

PART 2 - PRODUCTS

(Not used)

PART 3 - EXECUTION

(Not used)

END OF SECTION

SECTION 01750

MAINTENANCE OF TRAFFIC AND PUBLIC STREETS

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall be responsible for providing the Engineer with Maintenance of Traffic (M.O.T.) plans for lane closures and/or detours for approval. These M.O.T. plans shall be produced by an individual employed by the Contractor and certified as "Work Zone Traffic Safety Supervisor" by the American Traffic Safety Service Association, ATSSA.

B. The Contractor shall be responsible for the maintenance of public streets and traffic control for the duration of the project. The cost of Traffic Control including the cost of any required off duty police officers shall be included under the appropriate bid item in the Proposal. If no bid item for this is included, said costs shall be included in other appropriate items of the bid and no extra compensation will be allowed.

1.02 REGULATIONS

A. As used herein, any reference to Miami-Dade County, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas or streets, or their departments, published regulations, permits or data. The Contractor shall abide by all applicable laws, regulations, and codes thereof pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this Project.

1.03 MAINTENANCE OF TRAFFIC (M.O.T.)

A. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control, and other provisions throughout the Project as required by the MDCDTPW, Traffic Engineering Division (Traffic Division), FDOT or other governing agency. Traffic shall be maintained according to corresponding typical traffic control details as outlined in the MDCDTPW Manual. No street shall be completely blocked, nor blocked more than one-half at any time, keeping the other one-half open for traffic, without specific approval.

B. If required by the Traffic Division, the Contractor shall make arrangements for the employment of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. The cost of such off-duty policemen shall be paid from the Quotation Item established for this purpose. If required by traffic control permits or agencies, the Contractor shall work, odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction and no extra compensation will be

allowed.

C. The Contractor shall provide all barricades with warning lights, necessary arrow boards and signs, to warn motorists of the work throughout the Project. Adequate approved devices shall be erected and maintained by the Contractor to detour traffic.

D. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. The Contractor shall provide necessary access to all adjacent property during construction.

E. The Contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the MDCDTPW Manual. In addition, the Contractor shall be responsible for the resetting of all traffic control and information signing removed during the construction period.

F. Where excavations are to be made in the vicinity of signalized intersections, the Contractor is alerted that vehicle loop detectors may have been embedded in the pavement. Every effort has been made to show the approximate locations on the Plans; however, the Contractor shall verify these locations by inspecting the site of the work and by contacting the Traffic Division. Any loop detector which is damaged by the Contractor, whether shown on the Plans or not, shall be repaired or replaced by the Contractor, at his expense, and to the satisfaction of the Traffic Division.

G. Where applicable, the Contractor shall notify the Traffic Division 24 hours in advance of the construction date or 48 hours in advance of construction within any signalized intersection.

H. Temporary pavement will be required over all cuts in pavement areas, and also where traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed and the swale or median areas restored to their previous condition.

I. Pavement markings damaged during construction shall be remarked, as required by the Traffic Division.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 02230

CLEARING AND GRUBBING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Clear and grub the areas to be occupied by the facilities or utility systems to be constructed, including all areas to be excavated, filled, paved or planted as shown on the approved plans and as specified herein.

1.02 DEFINITIONS

A. Clearing shall consist of the cutting, removal and satisfactory disposal of all trees, stumps, brush, shrubs, rubbish and any other objectional material within the designated areas.

B. Grubbing shall consist of the removal and disposal of all stumps larger than 1-1/2 inches in diameter and other objectional material to a depth of at least 12 inches below the ground surface.

1.03 QUALITY ASSURANCE

In the course of the work, it may become to remove trees if they interfere with the work. Dade County and various municipalities have ordinances regulating the removal, relocation and pruning of trees in the public right-of-way, these ordinances shall be strictly adhered to. The Contractor shall obtain a permit from Dade County and/or other regulatory agencies having jurisdiction over the work area before removing, relocating and/or pruning any tree. The Contractor shall comply with all requirements and conditions of the permit.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 CLEARING AND GRUBBING

A. The Contractor shall remove and replace, where required all existing shrubbery, trees, grass, sprinklers, fences, signs, mailboxes, structures, roadways, sidewalks, curbs and similar items or structures in the way of all excavation necessary for the construction of the project.

B. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges. Where such cutting is for the purpose of pipeline installation, saw cutting shall be either parallel or at right angles with the centerline of the pipe,

C. To protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction, prior to proceeding with any work in the vicinity.

3.02 PROTECTION OF ADJACENT AREAS

The Contractor shall protect areas shown on the Drawings or designated by the Engineer of Record to remain protected from damage by construction operations by erecting suitable barriers of other acceptable means.

3.03 DISPOSAL

All roots, vegetation and other refuse removed from the site during clearing and/or grubbing operations shall be legally disposed of by the Contractor. Where required, the Contractor shall obtain a permit from Miami-Dade County and/or other regulatory agencies having jurisdiction over the work area before burning any material on the site.

- END OF SECTION -

SECTION 02260

STEEL SHEET PILING

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish and install steel sheet piling as shown in the plans or as required for a complete and satisfactory installation.

PART 2 - PRODUCTS

2.01 STEEL SHEET PILING

A. Steel sheet piling shall conform to the requirements of "High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality", ASTM A572/A572M-94b (AASHTO No. M223).

B. The Contractor will be responsible for design and selection. Structural plans for the sheet steel piling installation and the calculations for the required Section Modulus and the Sheet Piling Designation shall be prepared by a Professional Engineer registered in the State of Florida. Sealed plans shall be submitted to the Engineer of Record for approval prior to installation of the piling system.

B. Structural steel shall meet the requirements of ASTM Standard A36/A36M-94 "Structural Steel".

PART 3 - EXECUTION

3.01 The Contractor will be responsible for removing the temporary sheet piling and structural steel at the completion of the Project, such material will remain the property of the Contractor.

END OF SECTION

SECTION 02314

EXCAVATION, BACKFILL AND FILL FOR STRUCTURAL FACILITY AND UTILITY SYSTEMS

PART 1 - GENERAL

1.01 SCOPE OF WORK:

A. The work included under this Section consists of furnishing material and equipment, and performing all labor necessary for excavating, backfilling, filling and compaction of areas to be occupied by facilities or utility systems to be constructed.

B. Plan For Excavation: Prior to commencing the excavation, the Contractor shall submit a plan of his proposed operations to the Engineer of Record for approval. The Contractor shall consider, and his plan for excavation shall reflect, existing utilities that are to remain, the equipment and methods to be employed in the excavation.

1.02 QUALITY ASSURANCE

All excavations shall conform with South Florida Building Codes, the State of Florida Trench Safety Act, OSHA requirements and the provisions herein. Excavations shall be executed in accordance with all applicable requirements of Section 01016, including notification of Sunshine State One-Call Center (1-800-432-4770) 48 hours prior to any excavation.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Structural Fill: Structural fill shall consist of an inorganic, non-plastic, granular soil containing less than 10 percent material passing the No.200 mesh sieve (relatively clean sand or crushed limerock with a 2-inch max. particle size) with a Unified Soil Classification of GP, GW, SP, SP-GM, SW-SM or SP-SM.

B. Ballast Rock: Ballast rock shall be composed of hard, durable, sound pieces having a specific gravity of not less than 2.65. It shall be crushed rock conforming to the following gradation:

U.S. Standard sieve size	Percent by weight passing
1-1/2 inch	100
3/4 inch	30-75
½ inch	15-55
1/4 inch	0-5

C. Suitable Backfill Material: Backfill material shall be clean and free from all organic material, clay, marl or unstable materials, debris, lumps, or broken paving. No rocks or stones larger than 6 inches in diameter shall be allowed in any backfill. Material for backfill may be material resulting from excavation, if suitable in the opinion of the Department.

D. Select Backfill Material: Select backfill material specified herein shall meet all the general requirements for backfill material set forth above, and in addition, shall be free of any rocks or stones larger than 2 inches in diameter. Select backfill material may be material resulting from trench excavation, if suitable in the opinion of the Department, carefully selected to comply with these requirements.

PART 3 - EXECUTION

3.01 PREPARATION:

A. Clearing: The construction site shall be cleared of all obstructions and vegetation, including large roots and undergrowth, within 5 feet of the lines of excavation, in accordance with Section 02230. All debris created by this clearing operation shall be hauled from the site and disposed of by the Contractor.

B. Removals: Complete all removals within the lines of excavation prior to beginning excavation. Where required, all existing shrubbery, trees, grass, sprinklers, fences signs, mailboxes, structures, sidewalks, curbs, utility poles, or structures subject to damage resulting from the excavation should be transplanted, relocated, braced, shored, or otherwise protected and preserved.

3.02 EXCAVATION

A. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depths shown on the approved plans, but in all cases as required for construction, and as specified herein. All excavations shall be made by open cut.

B. When the walls of the excavations are to be kept vertical and in order to protect the safety of workmen, the general public, this or other work or structures, or excavation walls, or pipe installation including materials encountered in the excavation which have a tendency to slough or flow into the excavation, undermine the banks, weaken the overlying strata, or are otherwise rendered unstable by the excavation operation shall be retained by steel sheeting, stabilization, grouting or approved methods. Said methods shall comply with the Trench Safety Act (TSA). Sheeting and shoring or other approved method shall be designed by a Professional Engineer licensed to practice in the State of Florida.

C. For structures, the Contractor shall maintain the bottom of the excavation firm and dry, and maintain an elevation of the water one (1) foot below the concrete to be placed, by use of pumps, tremie or other acceptable method.

D. In areas where trench widths are not limited by right-of-way or easement widths, property line restrictions, existing adjacent improvements including pavements, structures, and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material.

E. Ladders or steps shall be provided for and used by workmen to enter and leave trenches.

F. Excavated material shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks. In congested areas, such materials, cannot be stored adjacent to the trench nor used immediately as backfill, shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, it shall be removed immediately to a storage area.

G. Materials suitable for use as backfill be hauled to and used in areas where not enough suitable material is available from the excavation. Material unsuitable for use in backfill shall be removed promptly and disposed of by the Contractor. Any pockets of organic matter, concrete or other unsuitable material encountered in excavating shall be removed and replaced with material satisfactory to the Department.

H. The excavation of walls for forms will not be permitted.

I. Excavation for structures:

1. Clear, as stated above, all existing items or structures in the way of the proposed pipeline or structures, and excavate as necessary to the depths and dimensions shown on the Plans, but in all cases as necessary for satisfactory installation.

2. Where pavements or sidewalks are cut, they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall, in general, be either parallel or at right angles.

3. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the Department.

4. Where interlocking steel sheeting is used, the Department may require that the sheeting be cut off at a level two (2) feet above the top of the installed pipe and that portion below the level be left in place.

5. Excavation for manholes and other piping appurtenances shall be sufficient to leave at least two (2) feet clear between their outer surfaces and the embankment or sheeting.

6. If, in the opinion of the Engineer of Record or the Department, the soil at that depth is unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the excavation shall be continued two (2) feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required.

7. When the pipe to be installed in a trench requires the pipe installers to work under and around the pipe, the Contractor may request the Department that he be allowed to exceed the 12" maximum clearance, specifying the clear distance desired.

8. The ends of existing mains shall be temporarily capped or plugged to keep them clean and the ends of all mains shall be temporarily anchored to keep the joints from blowing apart from internal pressure until the new mains can be reconnected to them.

9. In addition to specific construction methods specified, the general requirements in subsequent subsections, below, shall apply to the work of this project.

3.03 DEWATERING

A. Any water which accumulates in the excavations for structures shall be removed promptly by means satisfactory to the Engineer of Record in such a manner as to not create a nuisance to adjacent property or public thoroughfare. Pumps and engines for dewatering systems shall be operated with mufflers and at a minimum noise level suitable to a residential area. The Contractor shall be responsible for any nuisance created due to the disposal of the water from his drainage system.

B. Where applicable, the Contractor shall be required to obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-way or into any existing drainage structure or facility.

3.04 STOCKPILED MATERIALS

Suitable materials removed from the excavation shall be stored and disposed of in a manner which will not interfere with traffic at the site. Material suitable for backfill and not needed for backfill at the structure, but needed elsewhere shall be stockpiled until moved and used elsewhere.

3.05 BACKFILL

A. The excavation shall then be brought to the structures bottom elevation by placing and compacting 6-inch layers of Oolitic limerock (or material previously defined) to 95 percent of maximum density as determined by AASTHO T-180. Structural fill shall be supplied by the Contractor except as may otherwise be carefully selected from excavated material if deemed suitable in the opinion of the Engineer. Backfill around new structures up to the pavement base or surface of the ground shall be material not exceeding 6-inches in diameter, and shall be compacted in layers not exceeding 9 inches. Each layer shall be compacted with a powered hand tamper, or other approved method to at least 98% of maximum density as determined by AASHTO T-180

B. Backfill for precast manholes shall be drainfield limerock or specified pipe bedding material to a level to receive the manhole at the proper elevation.

END OF SECTION

SECTION 02315

TRENCHING AND BACKFILLING FOR PIPING SYSTEMS

PART 1 - GENERAL

1.01 WORK INCLUDED

A. The work included under this Section consists of excavating, backfilling and compaction as required for the construction of the piping systems as specified herein. (See Section 02314 for excavation for structures.)

B. All excavations shall be executed in accordance with the South Florida Building Codes, the State of Florida Trench Safety Act (TSA), OSHA requirements and all applicable requirements of Section 01016, including notification of Sunshine State One-Call Center (1-800-432-4770), 48 hours prior to any excavation.

PARTS 2 - PRODUCTS

2.01 BACKFILL MATERIAL

A. Except where a 1:10 cement/sand or flowable fill concrete mix is required (See Section 02745), granular soil backfill materials shall be utilized. Suitable backfill material shall be clean, shall not be expansive nor have high organic content, shall be free of clay, marl, unstable materials, debris, lumps and clods, and shall meet the following requirements:

1. Maximum Liquid Limit shall not exceed 12 as determined by ASTM D 423.

2. Maximum Plasticity Index shall not exceed 35 as determined by ASTM D 424.

3. Not more than 10 percent of weight shall be finer than 74 micron (No. 200) U.S. Standard Sieve.

B. Backfill material containing limerock shall have sufficient sand to fill the voids in the limerock. No stones or rocks larger than 6-inches in diameter will be permitted in any backfill. Backfill material placed to a point at least one foot (1 ft.) above pipe and appurtenances shall be select backfill material not exceeding 2-inches in diameter. For PVC gravity sewers backfill material placed at least two feet (2 ft.) above pipe shall be select backfill material not exceeding 2-inches in diameter. In any case, above this point, but up to the upper 6-inches of the trench, backfill shall be of material not exceeding 6-inches in diameter.

C. Debris, broken paving or broken concrete shall not be used.

D. Material for backfill may be material resulting from excavation, only if it meets the above mentioned requirements, or if suitable in the opinion of the Department. If sufficient suitable backfill material, including select backfill material, is not available from the site, additional material shall be furnished.

2.02 SELECT BACKFILL MATERIAL

Select backfill material specified in these specifications or required by the Plans shall meet all the general requirements for backfill material set forth above, and in addition, shall be free of any rocks or stones larger than 2 inches in diameter. Select backfill for copper tubing shall be limerock screenings or sand. Select backfill material may be material resulting from excavation, if suitable in the opinion of the Department, carefully selected to comply with these requirements.

2.03 BEDDING MATERIAL

Pipe bedding material shall consist of one of the following types of material, and accordance with the Department's Standard Details: (See Section UC-300 for Gravity Sewer Piping Foundations)

A. Bedding may be select backfill material, as specified above, if approved by the Department.

B. Crushed stone (or drainfield limerock) shall be used for bedding of piping (except for copper pipe) and/or manholes as shown on the Standard Details. Crushed stone shall consist of hard, durable, sub-angular particles of proper size and gradation, and shall be free from organic material, wood, trash, sand, loam, clay, excess fines and other deleterious materials. The stone shall conform to the requirements of ASTM C 33, Size No. 57 (3/4-inch rock) and be graded within the following limits:

Sieve Size	Percent Finer by Weight
1 ½-inch	100
1-inch	95 to 100
½-inch	25 to 60
No. 4	0 to 10
No. 8	0 to 5

C. Sand for bedding copper pipe shall be a dry screened sand. Sand shall be graded sand with 100 percent passing a 3/8-inch sieve and not more than 5 percent passing a No. 200 sieve.

D. Limerock screenings, sand or other fine material shall not be used for bedding.

E. All pipe bedding material shall be new, unless otherwise approve by the Department. Existing pipe bedding material may not be used.

2.04 BACKFILL UNDER MANHOLES AND METER VAULTS

Any excavation below the levels required for the proper construction of manholes or meter vaults shall be filled with Class C concrete. The use of earth, rock, sand or other materials for this purpose will not be permitted. (See Section 02314 for excavation for structures.)

PART 3 - EXECUTION

3.01 CLEARING

A. The Contractor shall perform all clearing necessary for the proper installation of all piping and appurtenances in the locations shown in the Drawings, in accordance with Section 02230, "Clearing and Grubbing".

B. Where required, all existing shrubbery, trees, grass, sprinklers, fences, signs, mail boxes, structures, sidewalks, curbs, utility poles or structures subject to damage resulting from the excavation should be transplanted, relocated, braced, shored, or otherwise protected and preserved.

3.02 EXCAVATION

A. The Contractor shall perform all excavation of every description and of whatever substances encountered, to the dimensions and depth shown on the Drawings. All excavations shall be made by open cut.

B. When the walls of the excavations are to be kept vertical and in order to protect the safety of workmen, the general public, this or other work or structures, or excavation walls, or pipe installation including materials encountered in the excavation which have a tendency to slough or flow into the excavation, undermine the banks, weaken the overlying strata, or are otherwise rendered unstable by the excavation operation shall be retained by steel sheeting, stabilization, grouting or approved methods. Said methods shall comply with the Trench Safety Act (TSA). Sheeting and shoring or other approved method shall be designed by a Professional Engineer licensed to practice in the State of Florida.

C. In areas where trench widths are not limited by right-of-way or easement widths, property line restrictions, existing adjacent improvements including pavements, structures, and other utilities, and maintenance of traffic, the trench sides may be sloped to a suitable angle of repose of the excavated material, but only from a point one foot above the crown of the pipe.

D. A substantially and safely constructed moveable shield or box, as approved by the Engineer of Record, may be used in place of sheeting, except where specifically called for on the Plans to install sheeting. Where a moveable shield or trench box, is used in place of sheeting and shoring, the trench shall be opened immediately ahead of the shield as pipe laying proceeds inside the shield.

E. Ladders or steps shall be provided for and used by workmen to enter and leave trenches.

F. Materials removed from the trenches shall be stored and disposed of in such a manner that they will not interfere unduly with traffic on public streets and sidewalks. In congested areas, such materials, cannot be stored adjacent to the trench nor used immediately as backfill, shall be removed to convenient places of storage. If any material is creating a public hazard or other unsafe condition, it shall be removed immediately to a storage area.

G. Materials suitable for use as backfill be hauled to and used in areas where not enough suitable material is available from the excavation. Material unsuitable for use in backfill shall be removed promptly and disposed of by the Contractor

H. Excavation for Pipes and Piping Appurtenances (See Section UC-300 for additional requirements for gravity sewer piping):

1. Clear, as stated above, all existing items or structures in the way of the proposed pipeline or structures and excavate as necessary to the lines and grades shown on the Plans.

2. Where pavements or sidewalks are cut they shall be cut by means of a mechanical pavement saw to form true and straight edges which shall in general be either parallel or at right angles with the centerline of the pipe.

3. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. A copy of all such notices shall be forwarded to the Department.
4. Excavate pipe trenches to a minimum of 6-inches below the outside bottom of the proposed pipe barrel to provide for the installation of the bedding material.

5. If, in the opinion of the Department, the soil at that depth is unsatisfactory as foundation material because it contains unsuitable marl, muck, organic matter, or other unsuitable material, the excavation shall be continued 2 feet deeper, except if a suitable foundation material is exposed at a lesser depth, further excavation will not be required.

6. If the soil is still unsuitable after the additional excavation as prescribed above, the trench bottom shall be excavated further in one foot increments in accordance with "Trench Overcut", below.

7. Sheeting and shoring shall be installed where necessary to control trench width, protect the workmen and the general public, and prevent damage to this or adjacent work, or structures.

8. Where wood sheeting or certain designs of steel sheeting are used, the Department may require the sheeting to be cut off at a level 2-feet above the top of the installed pipe and that portion below that level shall be left in place.

9. If interlocking steel sheeting is used, the Department may permit its complete removal in lieu of cut-off, providing removal can be accomplished without disturbing the bedding, pipe or alignment of the pipe. Any damage to the pipe bedding, pipe or alignment of the constructed utility caused by removal of sheeting shall be cause for rejection of the affected portion of the work. Not more than 100-feet of trench shall be opened ahead of pipe laying operations at one time unless a greater length of open trench is approved by the Department.

10. Trench widths, when measured at a point 12 inches above the top of the pipe, shall provide a 12-inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench width shall provide at least 6-inches clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used.

11. Excavation for appurtenances, such as manholes and valves, shall be sufficient to provide a clearance between their outer surfaces and the face of the excavation or sheeting, if used, of not less than 12-inches. Manhole excavations shall be carried to sufficient depth to permit their construction on the undisturbed bottom of the excavation.

12. Excavation for thrust block shall be made in such a manner so that, when concrete is placed, it will bear against a firm, undisturbed, vertical trench wall with bearing are in accordance with the schedule shown in the Standard Details.

13. Selected backfill shall then be placed and compacted in 6-inch layers up to the level of the pipe bedding material.

14. When the pipe to be installed in a trench requires the pipe installers to work under and around the pipe, the Contractor may request the Department that he be allowed to exceed the 12" maximum clearance, specifying the clear distance desired. The decision of the Department in this regard shall be final.

15. The ends of existing mains shall be temporarily capped or plugged to keep them clean and the ends of all mains shall be temporarily anchored to keep the joints from blowing apart from internal pressure until the new mains can be reconnected to them.

16. In addition to specific construction methods specified, the general requirements in subsequent subsections, below, shall apply to the work of this project.

I. Excavation for PVC Gravity Sewers and Service Laterals:

1. The Contractor shall make all excavations necessary for the construction of the gravity sewers and service laterals to the lines and grades shown on the Plans, and in accordance with the Standard Details.

2. In stable soils, trench widths when measured to a point 12 inches above the top of the pipe shall provide a 12-inch maximum clearance on each side, between the outside of the pipe barrel and the face of the excavation, or sheeting if used. Minimum trench widths under the same conditions shall be 6-inches on each side for the pipe for 4-inch and 6-inch pipe, and 9-inches on each side of the pipe for 8-inch pipe and larger. Minimum trench widths are required to provide room for a man to place and compact the haunching and initial backfill material. Embedment material shall be Class I. (See Section UC-300)

3. In unstable soils (defined as peat, much or other organic soils, elastic silts and clays below the water table, and fine sands below the water level), trench widths when measured at a point 12-inches above the top of the pipe shall be a minimum of five (5) nominal pipe diameter in width. Slightly greater width are at the Contractor's option in order to accommodate his trenching equipment, but the pipe bedding material shall extend to the face of the excavation, or sheeting if used. Embedment material shall be Class II. (See Section UC-300)

3.03 TRENCH STABILIZATION

Trench bottoms which are rendered soft or unstable as a result of construction methods, such as improper or inadequate sheeting, dewatering or other causes, shall be stabilized. In no event shall pipe be installed when such conditions exist. The Contractor shall correct such conditions so as to provide proper bedding or foundations for the proposed installation.

3.04 TRENCH OVERCUT

A. If, after excavating the trench to a depth of 2 feet 6 inches below the outside bottom elevation of the proposed pipe barrel, and the soil at that depth is still unsatisfactory as foundation material because it contains marl, muck, organic matter, or other unsuitable material, the pipe trench shall be excavated further in one-foot depth increments until a suitable foundation material is found. As a point of reference, it has been the Department's experience that, typically, trench overcut does not extend to depths more than 6 feet. However, the Department reserves the right to require trench overcut to depths up to 6 feet, i.e., to a point 8.5 feet below the bottom of the pipe.

B. Select backfill, as defined above, shall then be compacted in 6-inch layers up to the bottom of the proposed 6 inches of pipe bedding.

3.05 REMOVAL OF WATER

A. It is a basic requirement of these Specifications that excavation shall be free from water before pipe or structures are installed. However, it is realized that in certain sections of the work this cannot be accomplished economically and the Contractor may request permission to use the "Alternate Method of Construction" defined below.

B. The Contractor shall provide all necessary pumps, underdrains, well point systems, and other means for removing water from trenches and other parts of the work including structures. The Contractor shall continue dewatering operations until the backfill has progressed to a sufficient height over the pipe to prevent flotation or movement of the pipe in the trench, so that the backfill is above the natural water level.

C. Where applicable, the Contractor shall be required to obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-away or into any existing drainage structure or facility.

D. Water from the trenches and excavation shall be disposed of in such a manner as will not cause injury to public health, to public or private property, to the work completed or in progress, to the surface of the streets, or to cause interference with the use of the same by public. Submit the proposed method of handling and disposal of trench waster for approval before starting the excavation.

E. The Contractor is cautioned that Dade County or other governing body having jurisdiction over the work location may have regulatory rules and ordinances prohibiting, or limiting, the discharge of water from any excavation into sanitary and storm sewer systems, or to canals and drainage ditches. Obtain all necessary permits approving the location and proposed method of disposal before discharging water from any excavation into any portion of the public right-of-way, or into any existing drainage structure or facility.

F. Pumps and engines for dewatering systems shall be operated with mufflers and a minimum noise level suitable to a residential area. The Contractor shall be responsible for any nuisance created due to the disposal of the water from his discharge system.

3.06 INSTALLATION OF BACKFILL

A. Backfilling of pipe trenches will not be allowed until the work has been approved by the Department, pressure tested if required, and the Department indicates that backfilling may proceed. Any work which is covered or concealed without the knowledge and consent of the Department shall be uncovered or exposed for inspection. Partial backfill may be made to help restrain the pipe during pressure testing, if previously authorized by the Department.

B. The Contractor shall backfill all trenches and other excavations made in the process of installing the pipe. He shall maintain the surface of the backfill free from major irregularities and potholes.

C. Select backfill material shall be placed under and around the pipe to one foot above the crown (or to two feet above crown for PVC gravity sewers) in 6-inch layers. Each layer shall be thoroughly compacted to at least 90 percent of maximum density as defined by AASHTO Standard No. T-180, "Moisture-Density Relations of Soils using a 10-lb. (4.54 kg.) Rammer and an 18-in. (457 mm) Drop". The material in the ditch may be compacted by either hand tamper or a mechanized power tamper, provided the results obtained meet the continued approval of the Department. Particular attention and care shall be exercised in obtaining thorough support for the branch of all service connection fittings. Care shall be taken to preserve the alignment and gradient of the installed pipe.

D. Backfilling and compacting of material lying above a point one foot (or two feet for PVC pipe), above the crown of the pipe and below the pavement base or the surface of the ground, if out of pavement, shall be accomplished in layers not exceeding 9 inches in thickness. Each layer shall be thoroughly compacted with a powered hand tamper or a mechanized power tamper to at least 98 percent of maximum density as determined by AASHTO Specification T-180 or such greater density as may be required by the governing authority over the area in which the work is performed. A testing laboratory will make periodic field tests to determine the density being obtained in each lift, or layer, or the backfill. When compacted backfill fails to meet the specified percentage of maximum density as shown by test results, it shall be reworked and recompacted, and then retested. The reworking, recompacting and retesting of the backfill shall be repeated as many times as may be necessary to obtain compacted backfill with density meeting or exceeding the specified percentage as indicated by test results.

E. The Contractor shall exercise proper care to insure that no pipe will be broken or displaced through the use of the type of mechanical compacting equipment he selects. Water shall be added as required to obtain optimum moisture to facilitate compaction, but ponding or inundation of backfill will not be permitted. These ponding limitations shall not prohibit backfill in a wet trench up to the level of the natural water table if the "Alternate Method of Construction" is utilized.

F. Backfill shall in general be kept up with the rate of pipe laying. The backfill up to the springline of the pipe shall be placed as soon as practical after the laying of the pipe. On parts of the line where ground water level may be high enough to float the pipe, the placing of the backfill and the rate of pumping the trench shall be so controlled as to prevent the pipe from floating or moving from the line and grade shown on the Plans.

G. In the event that sufficient suitable material is not available at any point to properly backfill the trench, the Contractor shall transport suitable material from points of the line where such material is available or shall otherwise furnish suitable material.

H. Suitable material in excess of all backfill requirements and all unsuitable material shall be removed from the work and disposed of by the Contractor.

I. Within paved areas of trench excavation, the base and surfacing shall be reconstructed as specified under Section 02745, "Pavement Removal and Replacement".

J. Where cuts have been made through unpaved, stabilized rock roadways, driveways and parkways, surface restoration shall consist of 3 inches of compacted limerock overlaid by 3 inches of gravel or graded and washed rock with a maximum diameter of ½-inch, except as otherwise directed by the Department. The rock shall be installed over the entire width of the disturbed area and shall closely match the existing rock at each location. Several grades of rock may be required to attain this end, but it is not anticipated that more than one grade will have to be used at any one location.

K. Backfill for Structures: See Section 02314.

3.07 INSTALLATION OF PIPE BEDDING - FORCE MAIN AND WATER MAIN

A. As described above, all pipe trenches shall be excavated to a level 6-inches below the outside bottom of the proposed pipe barrel. The resulting excavation shall be backfilled with approved pipe bedding material, up to the level of the outside bottom of the proposed pipe barrel. This material shall be tamped and compacted to provide a proper bedding for the pipe and shall then be shaped to receive the pipe, including recesses for the pipe bells and couplings. Placing and compacting bedding up to the level of the lower one-third of the pipe barrel shall immediately follow the installation of the pipe. Bedding shall be provided under the branch of all fittings to furnish adequate support and bearing under the fitting.

B. Select Backfill material may be utilized where the excavated trench bottom is above water.

C. Any excavation below the levels required for installation of the pipe bedding shall be backfilled with approved bedding material, tamped, compacted and shaped to provide proper support for the proposed pipe.

D. For installation of gravity sewers, see Section UC-300, "Gravity Sewer Pipe Foundation".

3.08 COMPACTION AND DENSITIES

A. Methods of control and testing of backfill construction to be employed in this work are:

1. Maximum density of the material in trenches shall be determined by AASHTO Designation T 180.

2. Field density of the backfill material in place shall be determined by AASHTO Designation T 238.

B. Laboratory and field density tests are necessary to establish compliance with the compaction requirements of these specifications. The Department will not accepts projects for which successful laboratory and field density test results are submitted. Tests will be made at depths and locations to the satisfaction of the Department.

C. Trench backfill which does not comply with the specified densities, as indicated by such tests, shall be reworked and recompacted until the required compaction is secured.

3.09 ALTERNATE METHOD OF CONSTRUCTION

A. General:

1. A combination of conditions in the substrata, water table, or method of disposal may be encountered during the course of the work which make dewatering impossible, or only possible through the use of unusual methods, the cost of which is excessive. When such conditions are encountered, but only after all reasonable means to dewater the excavation have been employed without success, the Contractor, with the concurrence of the Department may elect to employ the following alternate method of construction. The concurrence of the Department shall be obtained and the Contractor shall limit the use of the alternate method of construction to such specific portions of the work as determined applicable.

2. The requirements set forth in other sections of these Specifications shall establish the required standards of construction quality for this work. Use of the alternate method of construction described hereinafter shall in no way be construed as relieving the Contractor of his basic responsibility for satisfactory completion of the work.

3. Subject to all of the requirements stated hereinabove, including approval by the Department, construction will be permitted in accordance with the following specifications.

B. Removal of Water: The installation of pipe, manholes and appurtenances under water will be permitted and the dry-trench requirements of "Removal of Water" will be waived.

C. Excavation: Excavation shall be performed in accordance with normal applicable excavation specifications.

D. Pipe Bedding for Ductile Iron and Vitrified Clay Pipe:

1. Pipe bedding shall be placed from 6-inches below the outside bottom of the proposed pipe barrel up to the level of the springline of the pipe barrel of gravity sewers and to the level of the lower one-third of the pipe barrel for force mains or water mains. The bedding material shall be washrock, drainfield limerock or approved material. Limerock screenings, sand or other fine organic material shall not be used.

2. The bedding material used shall be tamped and graded to provide a proper bedding for the pipe and shall then be shaped to receive the pipe. Bedding shall be provided under the branch of all fittings to furnish adequate support and bearing under the fitting.

E. Bedding for PVC Pipe: The pipe bedding, haunching and initial backfill material shall conform to embedment material listed in Section UC-300 for either stable or unstable soil conditions as required, and shall be placed and compacted in as stated in "Installation of Pipe Bedding", above.

F. Backfill:

1. After the pipe is installed, backfilling shall proceed in accordance with the provisions of "Installation of Backfill", except that select backfill material or pipe bedding material shall be used to backfill around the pipe and to a level one foot above the outside top (crown) of the pipe. Under no circumstances shall material other than select backfill or specified pipe bedding material be considered satisfactory for this purpose.

2. If the Alternate Method of Construction is used, all backfill material, shall be carefully lifted into the trench and released to fall freely therein when the bucket or container is near or at a moderate height above water level. Height of release shall be to the satisfaction of the Department. Below the existing water level, and to a point not more than 18-inches above the water level, the backfill material shall be carefully placed into place in uniform layers, of equal depth on each side of the pipe. From a point not more than 18-inches above the water level, and below the pavement base or the surface of the ground if out of paving, backfill material shall be placed and compacted for normal backfilling as provided in "Installation of Backfill" and "Compaction and Densities".

G. Backfill for PVC Gravity Sewers:

1. After the pipe is installed, backfilling shall proceed in accordance with the provisions of "Installation of Backfill", except that select backfill material or pipe bedding material shall be used to backfill to a level two feet above the outside top (crown) of the pipe. Under no circumstances shall material other than select backfill or specified pipe bedding material be considered satisfactory for this purpose.

2. If the Alternate Method of Construction is used, all embedment and backfill material, shall be carefully lifted into the trench and released to fall freely therein until the bucket or container is at or just above water level. Below the existing water level, and to a point not more than 18-inches above the water level, the backfill material shall be carefully placed into place in uniform layers, of equal depth on each side of the pipe. From a point not more than 18-inches above the water level, and below the pavement base or the surface of the ground if out of paving, backfill material shall be placed and compacted for normal backfilling as provided in "Installation of Backfill" and "Compaction and Densities".

3.11 RESTORATION OF EXISTING SURFACES

Paved and grassed areas disturbed by the operations required under this Section shall be restored as indicated on the approved Plans and/or specified herein.

END OF SECTION

SECTION 02534

PUMP STATION TESTING

PART 1 GENERAL

1.01 SCOPE

A. The Contractor shall test sewage pump station, to the complete satisfaction of the Engineer, prior to final acceptance by the Department.

B. The Contractor shall provide start-up service to place the pumps and controls in proper operation. During this service, the operation of the equipment will be reviewed and the station will be inspected for proper installation and operation. This service shall be provided by a representative of the manufacturer. The Contractor shall inform the Department 48-hours prior to commencement of such services. These services shall be at no additional cost to the Department.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 GENERAL

A. The Engineer and the Contractor shall jointly be present to witness test for determination of conformance with approved plans and specifications.

B. The Contractor shall notify the Department a minimum of forty-eight (48) hours in advance of the test.

3.02 PROCEDURE FOR TESTING SEWAGE PUMP STATION

A. The Contractor shall be responsible for testing the pump station in the manner described below:

1. Place the operating mode selector switch in the manual position.
2. Fill wet well with water.
3. Start and stop each pump sequentially and then both pumps together. While doing this, add water to the wet well as necessary.
4. With water level lower than pump’s shut-off point, place selector switch to automatic position.
5. Fill wet well slowly. Observe lead pump run.
6. Increase water flow into wet well for lag pump to run.
7. Stop pouring water into wet well and observe as both pumps shut off at the pre-selected levels.
8. Disconnect power to pumps and fill wet well to alarm level and make sure it operates.

9. Disconnect level controller and check that the lead pump is turned "on" and "off' at the proper levels by the float switches.

B. If the above parts of the test show that any component is not operating as intended, make necessary adjustments and/or repairs and repeat steps 1 through 9, until the entire system operates trouble free.

C. Fill the wet-well with water to the invert of the influent pipe. Leave it full of water for at least two hours. If the water level goes down, locate and repair the leak to the satisfaction of the Department. Repeat test to insure absence of leaks.

3.03 GENERATOR START-UP

A. Upon completion of the initial start-up and system checkout, perform a field test, with the Engineer notified in advance, to prove full specified power, stability, voltage and frequency. The test shall run for four hours using a portable, dry resistive load bank capable of incremental loading. Use the load bank instrumentation to check the meters on the generator. The generator set shall be able to take its full rated KW load when applied in one step. The generator set shall also run continuously for four hours with all available load connected through the automatic load transfer switch. Records shall be maintained through the testing periods on coolant temperature, lubricating oil pressure, ambient air temperature, voltage, current, frequency and kilowatts. Record the data at fifteen minute intervals through the tests. There shall be a thirty minute unloaded run at the conclusion of each test to allow the engine to cool down before shutdown. Three copies of the field tests data shall be furnished to the Engineer. The generator set shall also be tested under a simulated power failure to check that the transfer sequence operates satisfactorily.

3.04 CERTIFICATIONS

A. At the time of final acceptance inspection, and in addition to all other submittals required by the specifications, the Contractor shall furnish the following to the Engineer:

1. Submit letter from electrical panel manufacturer certifying that:

    a. The electrical panel has been inspected at the jobsite, after complete installation.
    b. The electrical panel and its components match approved shop drawings and are in compliance with the project's plans and specifications.
    c. The electrical panel and its components have not been modified, changed or altered in any way, shape, or form as to void the Underwriter Laboratory "UL" listing.
    d. The electrical panel and its components are safe to energize and operate.

2. Submit letter from the Contractor certifying that:

    a. The electrical panel has been installed in accordance with the Department's standards and these specifications.
    b. External wiring has been terminated inside the panel at the

designated “Terminal Boxes,” in accordance with the approved electrical schematic and/or shop drawings.

c. The electrical panel and its components have not been modified, changed or altered in any way, shape, or form as to void the Underwriter’s Laboratory “UL” listing.

d. The electrical panel and its components match approved shop drawings and are in compliance with the Department’s specifications.

e. The electrical wiring schematic and control schematic are current and reflect all approved field modifications made, if any.

f. The electrical panel associated electrical equipment are safe to energize and operate.

END OF SECTION

SECTION 02536

PRECAST MANHOLES & COVERS

PART 1 - GENERAL

1.01 SCOPE OF WORK:

This section includes minimum construction requirements for standard sewer manholes and precast concrete wet wells. It also includes precast concrete manhole sections with bell and spigot joints with masonry transition to covering, anchorage, coating/lining and accessories.

1.02 REFERENCES:

Unless otherwise indicated, all materials, workmanship and practices shall be in accordance with the current editions of the following standards:

A. Florida Building Code

B. ACI 318, Building Code Requirements for Reinforced Concrete; ACI 350 Code Requirement for Environmental Engineer Construction Structures.

C. PCI MNL 116, Manual for Quality Control for Plants and Production of Precast Concrete Products.

D. ASTM C62 - Specification for Building Brick (Solid masonry units made from Clay or shale).

E. ASTM C478 - Precast Reinforced Concrete Manhole Sections.

F. ASTM A123 - Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Products.

1.03 SUBMITTALS, INSPECTIONS:

Submit the following information for approval. Fabrication shall not begin until submission has been approved.

A. Satisfactory evidence that plant and production methods meet the requirements of PCI MNL 116 for the Quality Control of the Precast Plant, Concrete Batch Plant and Testing Lab.

B. Submit Design mix to the Engineer prior to fabrication.

C. Complete shop drawings of both concrete structure and castings and showing all dimensions, reinforcement data, concrete strengths, etc. If of a non-standard design or if required by the Engineer of Record submit design calculations and data. All computation shall bear the seal of a Professional Engineer registered in the State of Florida.

D. Manhole and Wet Wells: The WASD shall have the option of witnessing the manhole wet well pour, reinforcing or formwork prior to fabrication. Provide the Engineer a schedule of the manhole fabrication at the preconstruction meeting.

E. Provide a rebar cutting lists for Pump Station Wet Wells. The rebar cut list is not required for standard manholes.

F. Cylinder breaks shall be done for each lot in accordance with FDOT Standards (max of 50 structures per LOT). The manufacturer shall maintain records of the cylinder breaks for each design mix. The 28 day concrete cylinder break reports shall be submitted to the Department once the 28 day before the project closeout.

1.05 QUALIFICATIONS:

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum five years documented experience. United Concrete Products, Landmark Precast, Concrete Products of the Palm Beaches, TJ Precast, US Concrete Products or Approved equal.

B. Quality Control Plan approved by the FDOT. The testing laboratory and batch plant shall be included in the FDOT Quality Control Plan.

C. The Precast Manufacturer shall have a stamp from the Quality Control Manager on each completed precast structure. The Quality Control Manager Stamp shall indicate that the manhole was constructed in accordance with ASTM C478 and Municipality Standards and the date that the structure was fabricated.

1.06 TRANPORTATION

A. The precast concrete structure shall cure for a minimum of 72 hours. Transport of the precast structure to the jobsite is not allowed during the 72 hour curing period.

B. Comply with all applicable requirements of FDOT Section 450-16 Handling, Storage, Shipping and Erection.

PART 2 - PRODUCTS

2.01 MATERIALS:

Precast manholes shall conform to the requirements of ASTM C478, latest edition, the Miami-Dade Water and Sewer Department Standard Details and the following:

A. Properties:

1. Reinforcement of Grade 60 bars. (Pump Station Wet Wells require rebars not wire mesh reinforcing).
2. Concrete 4,000 psi.
3. Water Cement Ratio: 0.40 to 0.34 Standard Manholes, 0.34 Pump Station Wet Wells.
4. Waterstops: Ribbed PVC Waterstop with centerbulb.

B. Cement shall be Type II with a **maximum aggregate size of #57**. Aggregate shall be **well graded** to produce a less porous and stronger concrete.

1. **Gravity Sewer System Manholes**: In sanitary sewage applications, all manholes receiving the discharge of a force main, connecting to a major sewer line or interceptor sewer terminal manhole within a 350 foot radius of the pump station, drop manholes, or where called for in the plans and/or specifications shall have a concrete protective coating or a antimicrobial admixture in the concrete mix.

   The antimicrobial admixture in the concrete mix is specified below:

   a. An antimicrobial agent, Con^{MIC}Shield®, or approved equal, shall be used to render the concrete uninhabitable for bacteria growth.
   b. Contractor shall mix the liquid antimicrobial additive with the total water content of the concrete mix design in a proportion of 1 gallon per cubic yard. In the case of repairs to damaged concrete a proportion of 2 gallons per cubic yard shall be utilized.
   c. In some instances all of the concrete in the structure will receive the additive and in other instances only a portion of the concrete will receive the additive. Hence, the Contractor shall apply the additive only as directed in the specific instance.
   d. Precast Plant shall submit a letter of certification to the Department, stating that the correct amount and correct mixing procedure was followed for all antimicrobial concrete.
   e. Con^{MIC}Shield® antimicrobial additive shall be as manufactured by Con^{MIC}Shield® Technologies, Inc.; 541 Tenth Street NW #233, Atlanta, GA 30318; Phone: (877)543-2094.

2. **Pump Station Wet Wells**

   a. Pump Station Wet Wells shall have Xypex/BASF Crystalline Waterproofing Admixture or approved equal, applied at 2 to 3% of the weight of portland cement in the wet well by volume. The Crystalline Waterproofing Admixture shall be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy.

   b. Do not use Con-Shield with the Crystalline Waterproofing Admixture

   c. Concrete Protective Coating Preparation: The precast concrete structure with the Crystalline Waterproofing Admixture is required to cure for 28 days prior to application of the concrete protective coating. Prepare the interior wet well surface with an epoxy cement underlayment compatible with the concrete protective coatings approved for Pump Station Wet Wells, Epoxytec CPP, Tnemic 218 or approved equal.

C. Minimum shell thickness of manholes shall be eight (8) inches.

D. Lifting holes through the structure will not be permitted.

E. Three to five courses of brick shall be constructed atop the manhole corbel for height adjustment. Manhole adjustment grade rings may be utilized in lieu of clay bricks.

F. Precast Joints above Elevation +4.0. and Waterproofing

1. Standard Manhole: Ram-Nek preformed plastic joint filler, Swellseal Hydrophillic Waterstop by Deneef, or approved equal. Apply Non-Shrink Grout both inside and outside of the joint. Wrap the outside Corbel and Exterior joint with a heat activated high shrink membrane.

2. Pump Station Wet Wells: Ram-Nek preformed plastic joint filler, Swellseal Hydrophillic Waterstop by Deneef, or approved equal. Apply Xypex Concentrate Cementitous Slurry or approved equal to the exterior and interior of the joint between precast members for waterproofing.

G. Holes for pipe connections, with a diameter equal to the outside dimension of the connecting pipe plus an additional 4-inches, shall be formed in the manhole walls. No cutting or chipping of the pre-formed holes, or cutting additional holes in the precast concrete walls will be permitted.

H. The bottom slab shall be cast monolithically with the lower section and the longitudinal reinforcement extending into the slab. The free air drop of the mix shall not exceed five feet.

I. No construction joints will be allowed below an elevation of four feet above mean sea level. Construction joints will be allowed above elevation+4.0, if adequate keyways and waterstops, approved by the Department (Ribbed PVC waterstop with centerbulb), are provided. The Department may approve an alternate joint method in cases of excessively deeper and heavy structures.

J. Built-in ladders or climbing rungs will not be permitted in any sanitary sewer manhole and only in other structures where shown on the Plans and called for in the specifications.

K. Openings shall be sealed with hydraulic cement non-shrink grout on both the exterior and interior of the structure.

L. Furnish manholes with accessories listed under "Manhole Accessories", below.

M. Lid and Frame: See Section 05550, "Castings".

N. Waterproofing:
Xypex Crystalline Waterproofing Admixture C-1000R with red dye or approved equal, applied at 3% of the volume of Portland cement in the manhole by volume.
Rheomac 300D Admixture as manufactured by BASF with red dye applied at 2% of the volume of Portland cement in the manhole by volume.
The Crystalline Waterproofing Admixture may be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy.
Note: The Engineer may accept certification from the precast fabricator in lieu of the red dye.

2.02 CLAY BRICK UNITS AND GRADE RINGS

A. Clay brick shall be used in manhole construction. Clay brick shall conform to ASTM Standard C32, "Building Brick (Solid Masonry Units Made from Clay or Shale)". Bricks shall have true edges and sharp corners and shall have been cured for at least 14 days before being placed in any wall. Under no circumstances shall brick with holes be utilized anywhere in construction of a manhole or other structure unless specifically called out on the Plans or in the Specifications.

B. Manhole adjustment grade rings may be utilized. Rings shall be made of 100% recycled HDPE and available in cone opening diameters of 24, 27, 30 and 36-inches. Slope adjustment shall be attained by rotation of “wedge” rings from 4.1% to 0% grade. Rings shall have been tested to withstand HS25 loading through at least 1,100,000 cycles without cracking or other damage. Rings shall not be damaged by hydrogen sulfide manhole conditions and shall be waterproof when assembled with approved butyl sealant. Ring shall weigh six pounds or less and be equipped with UV inhibitor. Rings shall have been in successful service in multiple locations within the US for at least ten years and shall be warranted for five years. Rings shall be LadTech, Inc. HDPE Recycled Adjusting Rings or approved equal.

C. Exterior Shrink Membrane not required on the HDPE Grade Rings.

2.03 MORTAR AND GROUT: As specified in Section 04060 and 03600, respectively. Only Type II cement shall be used.

2.04 REINFORCEMENT: As specified in Section 03300.

2.05 SUMP: Where required, formed integrally with the base slab.

2.06 CONCRETE PROTECTIVE COATINGS **(Gravity Sewer Manholes)**

A. For manholes standard manholes that do not have a concrete protective coating or an antimicrobial additive (ConShield)in the mix, coat the interior of the manhole with Bitumastic 300M or approved equal, 16 mils minimum thickness. The manholes with a concrete protective coating or ConShield anti-bacterial admixture shall not have Bitumastic on the interior of the manhole.

Locations that require a Concrete Protective Coating or the Con Shield Admixture:

1 Manholes receiving the discharge of a force main.
2 Manholes within a 350 foot radius of a pump station wet well.
3 Drop manholes (if a drop connection is added to an existing manhole the existing manhole shall be rehabilitated with a concrete protective coating).
4 Any manhole location determined by the Engineer to have the probability of generating large quantities of sewer gas.

B. All concrete protective coating systems shall be pre-approved by the Water and Sewer Department based on testing done within the WASD system. Only products that have had a successful test application within the Miami-Dade Water and Sewer Department system and approved by WASD forces shall be allowed.

PREAPROVED PRODUCTS LIST- concrete protective coatings (standard manholes)

1. **Available Manufacturers: The manhole coating products below have passed the WASD testing protocol and have been approved for use for rehabilitation of standard manholes. The manhole rehabilitation products shall be used as a complete system with no third party products used unless approved in writing by the coating manufacturer. A one year warranty on the complete coating system from the project completion is required.**

   a. Uroflex as manufactured by Epoxytec International
   b. PPC as Manufactured by Polymorphic Polymers Corporation
   c. SP15 Spray Mortar, Sewer Guard HBS 100 Epoxy Liner by BASF
   d. Permaform MS-10,000 Fortified with ConShield or Cor-Guard Epoxy
   e. SprayRoq, Spray Wall and SprayShield GT Coating
   f. GEOKRETE System as manufactured by Quadex
   g. Mainstay DS-5 High Build Epoxy, Mainstay ML-72 Restoration Mortar
   h. GML Coating System: Green Monster Epoxy, GML-30 and GML-60 Epoxy Cement
   i. Raven Lining System: Raven 405 Epoxy, Raven 755 Epoxy Mortar

2. The manhole chimney shall utilize a flexible concrete protective coating. The acceptable flexible interior coatings for the manhole Chimeny are Epoxytec Uroseal, Uroflex or Geokrete.

C. Due to the probability of sewer gas generation, all manholes receiving the discharge of a force main, connecting to a major sewer line or interceptor sewer, drop manholes, or within a 350-foot radius of the terminal manhole immediately upstream of the pump station shall be either constructed of concrete containing Con^{MIC}Shield® antimicrobial additive or lined on all interior concrete surfaces with a pre-approved concrete protective coating or approved equal. Concrete protective coating system shall fully protect openings, such as for pipes, to insure that corrosive attack cannot take place at these locations. Protective system design for these areas will be checked as shop drawings. Note that boot systems are not accepted by the Department.

   Since the proprietary grouts used to close the annular area between the manhole wall and pipe entering or leaving the manhole are not compatible to the addition of Con^{MIC}Shield® these areas require liner or coating (as acceptable to the Engineer) protection even in manholes constructed of concrete containing this material.

D. All manhole exterior surfaces, from finished grade to base, shall be coated with Carboline Bitumastic 300M, 2 coats 16 mils minimum thickness or have Xypex/BASF Crystalline Waterproofing Admixture, applied at 2 to 3% of the volume of portland cement in the manhole by volume. The Crystalline Waterproofing Admixture may be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy.

E. If Con^{MIC}Shield® anti-microbial agent is used, interior coating and liners can be eliminated except as specified above.

2.07 CONCRETE ADDITIVE AND PROTECTIVE COATINGS **(Pump Station Wet Wells)**

A. Waterproofing Additive: Xypex Crystalline Waterproofing Admixture or approved equal, applied at 3% of the weight of Portland cement in the manhole by volume. The concrete protective coating shall be applied a minimum of 28 days after the casting of the reinforced concrete structure in order for new concrete to cure.

B. Epoxy Cement Underlayment to smooth and prepare concrete surface Epoxytec Ceramico, Tnemic 218 or approved equal.

C. Preapproved Concrete Protective Coating for Pump Station Wet Wells

1. Uroflex Coating System as manufactured by Epoxytec International
2. PPC as Manufactured by Polymorphic Polymers Corporation
3. or approved equal

2.08 MANHOLE ACCESSORIES:

All new sanitary sewer manholes shall be furnished with the following items. Where existing manholes will be modified or are scheduled to be refurbished, rehabilitation shall also include the following items unless otherwise approved by the Department.

A. Provide concrete protective coating system for manholes installed in locations identified to have high levels of sewer gas.

B. Provide high density polyethylene manhole infiltration inserts in accordance with Section 02625, unless the Department requires the installation of stainless steel insert.

C. Exterior Shrink Membrane on Corbel and Exterior Joint; <u>On all manholes</u> (excluding the HDPE grade rings)install a heat activated, high shrink membrane, on the manhole's exterior, at each section joint and from the cast iron frame to the corbel section. Membrane shall be Wrapid Seal, by Canusa Corrosion Protection and Sealing, or approved equal with the following properties:

PRODUCT COMPONENT	PROPERTY	TEST STANDARD	UNIT	RESULTS
ADHESIVE	Softening Point	ASTM E28	Deg. C (Deg. F)	100 (212)
	Lap Shear Strength	DIN 30 672	N/cm^2 (psi)	8 (12)
BACKING	Tensile Strength	ASTM D638	MPa (psi)	20 (2900)
	Elongation	ASTM D638	%	600
	Hardness	ASTM D2240	Shore D	46
	Abrasion Resistance	ASTM D1044	mg	45
SLEEVE	Peel Strength	ASTM D1000	N/cm^2 (psi)	15 (9)
	Water Absorption	ASTM D570	%	0.05

	Low Temp. Flexibility	ASTM D2671D	Deg. C (Deg. F)	-40 (-40)

PART 3 - EXECUTION

3.01 EXCAVATION:

A. Refer to Section 02314, "Excavation, Backfill and Fill for Structures" for specific procedures, requirements and testing methods appurtenant to the work under this Section.

B. Excavation shall extend to a level 12-inches below the level of the outside bottom of the base slab. If necessary, provide sheeting and shoring for the excavation.

C. Backfill resulting excavation with drainfield limerock or specified bedding material to a level to receive the structure at the proper elevation.

3.02 GENERAL INSTALLATION

A. The precast base shall be set level, with the walls plumb on the graded crushed rock bedding.

B. If any surfaces of structures are exposed to view and to a depth of 6 inches below grade, the Contractor shall fill all depressions and all air holes with mortar, dampen surfaces, and apply an approved bonding agent then spread slurry, consisting of one part cement and one and one-half parts sand, by damp loose volume, on the surface with clean burlap pads and sponge rubber floats. The Contractor shall remove any surplus by scraping and then rubbing with clean burlap. Finish surface shall be suitable to receive paint.

3.03 INSTALLATION OF MANHOLES

A. Place base slab and manhole sections plumb and level. Coat exterior of precast structure with Bitumastic 300M or approved equal. Install heat activated, high shrink membrane, on the manhole's exterior, at each section joint and from the cast iron frame to the corbel section.

B. During all backfilling operations, the backfill level shall be kept even on all sides of the structure. Exercise every precaution to prevent damage to, or unplanned loading of, the structures and its appurtenances.

C. Lay clay brick in running bond. A minimum of three and a maximum of five courses shall be constructed atop each manhole corbel. Lay masonry units in full bed of mortar, with full head joints, uniformly jointed with other work. Stucco inside and out with 3/4-inch of mortar.

D. Set cover frames and covers level without tipping, to correct elevations.

E. Exterior surfaces of all structures shall be painted prior to the installation as specified elsewhere herein.

F. Openings shall be sealed with non-shrink grout. No expanding grout shall be allowed.

G. After satisfactory installation and testing, all interior concrete surfaces of the new manhole shall be seal coated in accordance with Section 2.06-A.

H. The invert channels of the manhole shall be formed of brick or brick rubble thoroughly bedded and covered with sand-cement grout, accurately shaped to a semi-circular bottom conforming to the lower half of the connecting sewer pipe. Steep slopes outside the invert channels shall be avoided. Changes in size and grade shall be made gradually and evenly. Changes in the direction of the sewer or entering branch shall be a smooth curve with radius as long as practicable.

I. It shall be the Contractor's responsibility to assure that the frames and covers are set to match proposed finish paving grades at the manhole locations.

J. Gravity sewers shall connect to the manholes in accordance with Standard Details SS 7.0 and Section UC-250 "Gravity Sewer Systems".

3.04 ALTERNATE INSTALLATION

Installation methods given below in this Section shall only apply if permission is granted by the Engineer of Record to use the "Alternate Method of Construction" as specified elsewhere herein. All provisions of that Section shall be applied to the installation of the structures with the specific modifications as follows:

A. Excavation

Excavation shall be carried to a depth of two feet below the bottom of the base slab.

B. Special Bedding

1. Bedding shall be crushed stone or gravel meeting the requirements of ASTM Standard C33 "Concrete Aggregates", latest edition, gradation 67.
2. The bedding shall be placed in the excavation from cut bottom to the level of the bottom of the slab. Thereafter it shall be thoroughly rammed and tamped by use of a crane and weight or other means suitable to the Engineer of Record to provide a stable base for the structure. Tamping and, if necessary, additional filling shall be carried on until the Engineer of Record is satisfied that a suitably stable base has been created for the structure.

C. Backfill

1. After the structure is installed, special bedding material as specified immediately above shall be carefully hand or machine tamped around the structure up to a level of no more than eighteen inches above the water level. Thereafter the procedures and materials specified for backfill and compaction, shall be used to complete the installation.

2. During all backfilling operations the backfill level shall be kept even on all sides of the structure and the Contractor shall exercise every precaution to prevent damage to, or unplanned loading of, the structure or its appurtenances.

END OF SECTION

SECTION 02540

PUMP STATION

PART 1 – GENERAL

1.01 SCOPE OF WORK

The purpose of this Specification is to establish uniform MD-WASD requirements for the design and construction requirements for wastewater pumping stations. This Specification does not purport to cover all materials or installation procedures which may be required. However, it is intent of the MD-WASD to obtain a complete and working installation under this project, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.02 QUALITY ASSURANCE

All material and installation shall be in accordance with the MD-WASD's Design and Construction Standard Specifications and Details.

1.03 DEFINITIONS

See Section 01005, "Defined Terms"

1.04 PROJECT APPROVAL

The approval of the MD-WASD and the local governing agencies shall be secured, prior to any construction related activity.

1.05 SPECIAL CONDITIONS

The work shall proceed in accordance with the following specification sections, found herein:

A. Section 01011 - Site Conditions
B. Section 01016 - Safety Requirements and Protection of Property
C. Section 01031 - Grades, Lines and Levels
D. Section 01100 - Special Project Procedures
E. Section 01720 - Project Record Documents
F. Section 01725 - Project As-Builts
G. Section 01730 - Operating and Maintenance Instructions
H. Section 01740 - Permits
I. Section 01750 - Maintenance of Traffic and Public Streets
J. Section 16051 – Pump Station Electrical Materials
K. Section 16268 – Low Voltage Variable Frequency Drive
L. Section 16420 - Stationary Engine-Generator Sets
M. Section 16510 – Interior Lighting
N. Section 16780 – S.C.A.D.A. System RTU Installation
O. Section 16940 – Pump Station Control Panel

1.06 PERMITS, INSPECTIONS AND FEES

A. The Contractor shall obtain and pay for all permits and fees in accordance with Section 01740, "Permits".

B. Inspection by MD-WASD personnel is required in addition to, not in lieu of, municipal and County department inspections. No facility will be accepted until it has passed all inspections, including pavement installation or replacement.

1.07 PRECONSTRUCTION CONFERENCE

A. Prior to commencement of the work, the Contractor shall attend a Preconstruction Conference.

1.08 SUBMITTALS

A. The Contractor shall furnish "As-Builts" in accordance with Section 01725. The Contractor shall submit operating and maintenance instructions and all other submittals in accordance with Section 01730.

B. Where the Specifications require test certification or certification that certain products or material furnished are as specified, the Contractor shall deliver such certification to the MD-WASD. No material or equipment shall be approved for use in the work until individual certification has been received.

1.09 DESIGN REQUIREMENTS

A. GENERAL

1. Pumping stations shall be designed in accordance with the State of Florida Department of Environmental Protection (DEP) Rules, Chapter 62-604 for Wastewater Facilities, with OSHA requirements and with the "Florida State Board Health Sewage Guide" and the recommendations of Chapter 12 of the ASCE Manual No. 37, "Sewer Design and Construction", except as otherwise provided herein. Wet wells shall be classified as hazardous areas, Class 1, Division 2, Group C.

2. In addition, pump stations shall be designed in accordance with the MD-WASD's "Supplemental Design Guidelines for Lift Stations and Force Mains" found in Appendix B. The MD-WASD's "Standard Pump Station Drawings", bound herein, are provided solely as an aid and shall not be considered as completed construction drawings.

3. Pump station shall be designed to serve no more than one quarter section. Also design shall incorporate corrosion inhibiting measures, practices and or products as found in the "Basic Guide to Corrosion Protection for Miami-Dade Water and Sewer Department Projects", found in Appendix D.

4. All applicable drawings of the MD-WASD's "Standard Details", found in PART IV herein, shall apply. Water service at pump stations shall be installed as shown in M-DWASD's Standard Pump Station Drawings.

B. STRUCTURE AND TYPE

1. Stations may be either precast or cast-in-place, installed by Caisson Method.

2. Stations shall be of reinforced concrete, and may be of the wet well-dry well type or submersible pumping station type, with depths no greater than 24 feet. The dry well shall maintain the cross-sectional area of the floor, up to ground level and shall be provided with an intermediate removable deck. Dry wells with entrance tubes shall not be approved.

3. Dry wells shall be close to square, in shape, with a minimum area of:
   64 sq. ft. - for stations of 50 horsepower per pump and below,
   100 sq. ft. - for stations of 60 to 75 horsepower per unit.
   In all cases, dimensions of dry well shall also be based on the size of the pumping equipment and appurtenances approved for installation therein.

4. Structural design shall conform with the requirements of the Florida Building Code and the American Concrete Institute "Building Code Requirements for Reinforced Concrete", ACI 318, latest edition. In order to provide strength, stability, and serviceability for sanitary structure under special loading conditions, the recommendations of ACI Committee 350 Report entitled "Concrete Sanitary Engineering Structures" (ACI 350) shall be used as a guide.

5. Wet-Well/Dry-well configuration shall be used when the station requires installation of pumps weighing more than 1,500 pounds.

6. Wet-wells may be constructed as an integral part of the dry-well or as a separate structure. Piping between separate wet-well and dry-well structures shall be provided with a flexible joint at the structure wall. There shall be at least four feet of separation between such structures. Wet-well operating capacity determination shall be based on pump cycling, not on a fixed determined wet-well effective volume. The method of determination shall be as specified in Section 3.4.3 of “Supplemental Design Guidelines for Pump Stations and Force Mains”.

C. ACCESS

1. Wet-well/dry-well pumping station: shall have separate outward opening access hatches for the-wet well and dry-well sized for the pump. Hatches shall be provided in accordance with Section 05540. Wet-well hatches shall have a minimum clear opening of 30 inches by 30 inches and shall be located directly above the influent pipe and the operating control tubing. Dry-well hatches shall have a minimum clear opening of 48-inches by 72-inches centered above the pumps. In no case shall dry-well opening be less than as recommended by pump manufacturer.

2. Submersible pumping station: shall have hatches designed for an H-20 live load and sized according to pump manufacturer's recommendations. [See Section 05540 and Plans entitled; “Typical Submersible Sewage Pumping Station].

D. PUMPING EQUIPMENT

1. For wet well-dry well stations furnish and install vertical, centrifugal sewage pumps, in accordance with Section 11210.

2. For submersible stations furnish and install submersible sewage pumps in accordance with Section 11205.

3. Each pumping unit shall be designed to pump the peak flow at the required head.

E. PIPING

1. Each pump suction line shall be sized for a maximum velocity of 5 feet per second at the rated peak flow. Provide a 90 degree flared elbow in the wet well and an isolation plug valve in the dry well, of a wet well-dry well type station. The plug valve shall be the same size as the suction piping. Provide a plug valve per pump in the valve vault of a submersible type station together with a further isolation plug valve just outside of the valve vault on the force main.

2. Discharge lines shall be provided with horizontally mounted check valves of the outside-lever and weight type and full size isolation plug valve. Discharge piping shall be sized for a maximum velocity of 6 feet per second at rated peak flow or a minimum of 6-inches in diameter, whichever is greater. Each pump discharge line shall be equipped with a petcock and pressure gage. The combined discharge line shall be equipped with a bronze tapping saddle with 1-inch plugged tap for installation of SCADA by MD-WASD.

3. All pipes and fittings furnished and installed shall be in accordance with Section 15060, "Pipe and Fittings".

4. Piping within the pumping station shall be flanged ductile iron pipe. Piping passing through concrete walls shall be provided with wall pipe or sleeves.

5. Fresh water and seal water pressure piping shall be copper. Seal water suction, drain and overflow piping shall be PVC. Small piping (including conduits), passing through concrete walls shall be provided with wall sleeves.

6. Valves 6-inches and larger shall be plug valves of the non-lubricated eccentric type with resilient faced plugs. Valves 2-inches and smaller shall be gate valves.

F. EMERGENCY PUMP CONNECTION

1. A connection to the discharge piping shall be provided for emergency pump-out of the wet well. It shall consist of necessary fittings, isolation plug valve, a ductile

iron or brass quick-connect male fitting and a dust cap with an air release petcock. A petcock for gage at discharge of force main shall be provided.

G. ELECTRICAL SERVICE

1. Coordinate with the power company early during the design stage. No booster or set-up transformer shall be permitted. Service shall be 3 phase, 208 or 480 volt, and adequate for the load served, but never smaller than the sizes indicated below:

SERVICE SIZE

Voltage	Pump Motor H.P.	AMP	THW Cu	Conduit
208	5 thru 10	110	# 3	1-1/2”
208	15 thru 25	200	# 3/0	2-1/2”
480	5 thru 15	70	# 3	1-1/2”
480	20 thru 50	200	# 3/0	2-1/2”
480	60 thru 75	250	250 MC	3”

2. Neutral and grounding conductors to be sized according to NEC and FBC.

H. STANDBY POWER

1. As shown on the Plans titled, “Typical Submersible Pumping Station (WASD Design Standard Update 2005)”, the MD-WASD will require, as a minimum, construction of a generator building, fuel tank pad and all interconnecting piping and conduits. MD-WASD may require actual provision and installation of the diesel generator, fuel tank and associated items dependent upon the criteria provided below in this subsection.

2. Stations Above 350 GPM Capacity: Stations that will a peak flow above 350 GPM shall require approval and installation of an emergency generator and fuel tank (Section 16420).

3. Stations at/or Below 350 GPM Capacity: May require stationary generator based on the area's need for uninterrupted service (i.e. hospitals, government centers, correctional institutions and similar facilities).

4. Unusually High Horsepower Motors: Which cannot be operated by portable generators shall require a stationary generator.

5. Special Cases:

a) The MD-WASD may, at its discretion, require portable generators at stations having unusual characteristics, or when an existing pump stations being upgraded above 350 GPM, or when an institution as described in Article 1.09-H.2, above, is added and no space exist for a permanent generator.

b) If the project will contribute less than 350 GPM, but the pump station is being designed to handle more than 350 GPM (PEAK) for the entire service area, no installation of emergency generator and fuel tank is required.

c) A pump station serving only one development and designed for peak flows of 150 GPM or more shall require installation of an emergency generator and fuel tank.

I. FIRE EXTINGUISHER

1. General: One fire extinguisher shall be wall mounted in the dry well on suitable brackets furnished by the manufacturer, bearing the mark of approval of Underwriter's Laboratory, Inc., and ratings conforming to NFPA No. 10, but not less than 3-A; 20-B:C. Fire extinguishers shall be of steel construction with red enamel finish, except the valves which shall be stainless steel or chromium-plated.

2. Dry Chemical Extinguishers: shall be rated for Class A, B and C fires, shall be ten (10) pound capacity, nitrogen operated and shall be steel with red enamel finish except valves which shall be stainless steel or chromium plated. Dry type extinguishers shall be Allenco, Badger-Powhatan, Larsen or approved equal.

3. Carbon Dioxide Extinguishers: shall be steel with red enamel finish, except valve and operator which shall be stainless steel or chromium-plated, Allenco Model 7400-10, Badgern-Powhatan or approved equal. Hose diffuser horns shall be non-metallic.

J. PANELBOARD & TRANSFORMER

A 100 amp single phase 120/240V breaker panelboard shall be provided to power all miscellaneous loads such as lights, seal water pump, air compressors, fans, sump pumps, dehumidifier, etc. If required, a dry type 480V-120/240V transformer wall mounted at the intermediate deck level shall be provided to feed all these loads. The transformer shall be sized to supply all of the connected load plus 30% of spare capacity.

K. STUCCO

Only the outside wall surfaces of the above-grade structure (to six inches below grade) shall be stuccoed. Materials shall conform to the Florida Building Code (latest edition).

L. LIGHTING

1. Provide LED indoor lighting with a minimum of 10 foot-candle power at the intermediate deck and at the lower level.

2. Where outdoor lighting is required provide LED wall-mounted fixture with photoelectric control.

3. Lighting fixtures shall be in accordance Section 16510.

M. ALARM SYSTEM

Provide an alarm system to give audible and visual alarms of pump station malfunction, in accordance with Section 16051.

N. AIR MOVING EQUIPMENT

All air moving equipment shall be in accordance with Section 15860.

O. INTERMEDIATE DECK

Provide an intermediate deck at an elevation with at least one-half foot clearance above the top of the motor, but never less than 7-foot clearance from floor slab. The deck shall be constructed of removable galvanized steel grating supported on galvanized steel channels. Grating shall be anchored to support frame channels. The channels shall be located such, that clear access is provided to the motors from the hatch opening when the grating is removed. Design in accordance with FBC and OSHA requirements.

P. LADDER

Provide a galvanized steel ladder from the hatch to the intermediate deck. It shall have extension rails which can be pulled up when the hatch is open. A second galvanized steel ladder shall be provided from the intermediate deck to the bottom floor. Ladders shall be in accordance with the requirements of the FBC and OSHA. A safety railing and stainless-steel chain shall also be provided around the opening in the intermediate deck for the bottom ladder.

Q. SURFACE PROTECTION - PAINTING

1. The inside walls of the dry well and all piping and equipment shall be properly primed and painted.

2. Paint material and specification requirements are shown in Section 09900.

R. SITE & LOCATION REQUIREMENTS

1. Stations shall be located on property of adequate size and said property shall be conveyed to the MD-WASD by fee simple title.

2. Location of pump stations shall be in accordance with local codes or governing authority having jurisdiction at the proposed site. In any case, a 25-feet long by 12-feet wide paved driveway, which shall provide access to all structures, wet well, dry well, valve pit, emergency generator and fuel tank, if required. Typical pump station site plans shall have a 45-feet by 65-feet format. A minimum separation of 5-feet shall be maintained between any proposed structure and a water or sewer main, and between two sewer

mains (edge to edge). Proposed rim elevations and final grade elevations shall be in compliance with DERM requirements.

3. Direct access shall be provided, without entering or crossing private property, by a paved driveway alongside the drywell and the wet-well for parking of maintenance trucks. The driveway shall be direct and clear from the roadway to the dry well / wet well. Control panels and emergency pump-out shall be located to permit clear access through driveway

4. Provide a chain link fence, in accordance with Section 02822, that will enclose the pump station property. The fence shall be 6-feet high minimum, with a 12-foot wide, minimum, double-leaf gate for the paved driveway. Barbed wire and extension arms may also be required in some locations.

5. Other types of property enclosures, such as block walls, may be substituted but shall require the prior approval of the MD-WASD.

6. Unpaved areas shall be completely sodded after construction is complete. Additional landscaping as required shall be incorporated in the Plans as set forth in Section 02900.

1.10 COMPLETED AS-BUILTS

A. The as-builts shall be completed and submitted to the Department at the time of system testing. Testing will not be considered complete until as-built record documents are submitted and approved by the Department. Completed finalized as-built package are required by the Department within 10-days upon the successful testing of all mains, equipment and appurtenances.

B. Complete topographic and boundary survey for the pump station shall be signed and signed and sealed by the Florida Licensed Professional Surveyor and Mapper as part of the as-built plans. All information required of a boundary survey shall be contained on the as-built plans to include the legal description of pump station site, easements and right-of-ways abutting the pump station site and location of all surface facilities recorded by a PSM. All utilities within pump station property shall be properly shown, along with their associated elevation and clearance.

C. The mechanical, structural and electrical information on as-builts for Pump Stations and Plant work shall be reviewed and signed and sealed by a Florida Registered Professional Engineer when designated as the responsible party for the corresponding portion of the as-builts. The Engineer shall verify that all mechanical, structural and electrical information on the as-built the work was constructed as designed on the Design Plans. Any deviation shall be noted and approved by the Department.

PART 2 - PRODUCTS

MDWASD

2.01 GENERAL

A. All material for use in the Project shall be new and of recent domestic manufacture and shall be the products of reliable manufacturers or suppliers who, unless otherwise specified, have been regularly engaged in the manufacture of such materials and equipment for at least five (5) years.

B. All fittings and components shall, wherever possible, be standard stock articles of well known manufacturers.

C. Where the Specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use, but, unless otherwise provided, articles or products of similar characteristics may be offered for the approval of the MD-WASD, after prior approval by the Engineer.

D. Copies of complete descriptive data shall be furnished regarding all material, consisting of dimension drawings, catalog references and other information necessary to clearly identify and evaluate each article.

E. Unless otherwise specified, all fabricated items, steel bolts, nuts washers and all other miscellaneous ferrous metal items (except cast iron and stainless steel) shall be hot-dip galvanized in accordance with ASTM A123, "Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products" and ASTM A153, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware". Where the word "galvanized" or its abbreviation is used on the Plans or in these Specifications, it shall mean hot-dip galvanized. Fabricated items shall be hot-dip galvanized after fabrication. Internal threads shall be tapped or re-tapped after galvanizing. All threaded fasteners together with their associated components, such as washers, located in the wet well shall be type 316 stainless steel.

F. Pumps, motors, electrical items and other station equipment shall be shipped, handled, stored and protected in accordance with Section 01600, "Materials and Equipment Shipping, Handling, Storage and Protection"

G. Any salvageable pipe, fitting, or other miscellaneous material or equipment, removed from the MD-WASD-owned mains during construction and not reused in the work shall be cleaned, hauled to and stored where directed by, and shall remain the property of the MD-WASD. All other material and equipment shall be disposed of by the Contractor at his expense.

H. To insure satisfactory and successful final painting of materials and equipment to be furnished, it is essential that the paints applied in the shop and in the field be mutually compatible. To this end, require that the shop paints applied to materials and equipment be compatible with the paints proposed for use in the field, or determine what shop paints have been used and select field paints compatible therewith, all as approved by the MD-WASD.

2.02 PUMPS

A. Submersible Pumps – See Section 11205 Submersible Pumps

B. Dry Well Centrifugal Sewage Pumps – See Section 11210 Vertical (Dry Pit) Centrifugal Pumps

C. Pump Warranty

1. Submersible Pumps: The pump manufacturer shall warrant the units supplied to the owner against defects in workmanship and materials for a period of 5 years or 10,000 hours of operation, in normal use, operation and service. The warranty shall be in printed form and shall apply to all similar units. A copy of the warranty shall be supplied with each pump. The warranty shall consist of the following: From 0 18 months or 0 - 3,000 hours, 100% warranty, From 19 39 months or 3,001 6,500 hours, 50% warranty, From 40 60 months or 6,501 10,000 hours, 25% warranty.
2. Centrifugal over 60 HP and under: Same as for submersible pumps.
3. Centrifugal over 60 HP: One year Warranty minimum. Project specific as required by the Engineer.

2.03 WET WELL

A. See Section 02536 Precast Manholes.

B. Concrete Protective Coatings: See WASD Pre-Approved Product List Sheet 10.7 Wet Well Coating.

C. Crystalline Waterproofing: Pump Station Wet Wells shall have Xypex/BASF Crystalline Waterproofing Admixture or approved equal, applied at 2 to 3% of the weight of portland cement in the wet well by volume. The Crystalline Waterproofing Admixture shall be used in lieu of painting the exterior of the structure with Bitumastic Coal-Tar Epoxy. The precast concrete structure with the Crystalline Waterproofing Admixture is required to cure for 28 days prior to application of the concrete protective coating.

D. Water Cement Ratio: 0.34 for Pump Station Wet Wells

E. Reinforcement of Grade 60 bars. (Pump Station Wet Wells require rebars not wire mesh reinforcing).

F. Waterstops: Ribbed PVC Waterstop with centerbulb.

G. No construction joints will be allowed below an elevation of four feet above mean sea level. Construction joints will be allowed above elevation+4.0, if adequate keyways and waterstops, approved by the Department (Ribbed PVC waterstop with centerbulb), are provided. The Department may approve an alternate joint method in cases of excessively deeper and heavy structures.

2.04 CASTINGS

A. GENERAL

MDWASD

1. Material used in the manufacture of the castings shall conform to ASTM A48, "Gray Iron Castings", for Class 35B. Proof Loading: AASHTO M306 Loading

2. Castings shall be in compliance with Standard Details and Section 05550, "Castings".

B. MANHOLE FRAMES AND COVERS

Manhole covers and frames shall be MD-WASD Type "A" with roadway cover, U.S.F. Fabrication No. 310, or approved equal. The covers shall be cast labeled "SANITARY SEWER".

C. VALVE BOXES AND COVERS

Valve Boxes and Covers shall be MD-WASD No. 52 or No. 53 in accordance with the Standard Details appended hereto. Valve box covers shall be cast labeled with the letter "S".

2.05 BRICK

A. Concrete brick shall conform to ASTM Standard C55-01 "Concrete Building Brick". Clay brick shall be used in manhole construction. Clay brick shall conform to ASTM Standard C62-00, "Building Brick (Solid Masonry Units Made from Clay or Shale)".

B. Bricks shall have true edges and sharp corners and shall have been cured for at least 14 days before being placed.

2.05 CONCRETE, MORTAR AND GROUT

See Sections 03300, 04060 and 03600, respectively.

2.06 CONCRETE BLOCK

Unit masonry shall conform with Section 04220.

A. Standard units of concrete block shall conform to ASTM C90, "Hollow Load-Bearing Concrete Masonry Units", Normal Weight, Grade N-1, except that the maximum moisture content shall not exceed 50 percent of the total absorption.

B. Louvered concrete ventilator block shall conform to the FBC for materials and quality control. Louvered blocks shall be considered non-load bearing units requiring a reinforced concrete lintel above, when placed in standard concrete block construction. Size and reinforcement of the lintel shall be as required by the FBC, however, the lintel shall bear not less than 8 inches on the masonry at each end.

C. Louvered ventilator blocks shall be furnished in modular units 16 inches square nominal (15-1/2 inches by 15-1/2 inches actual), and each unit shall have four louvers.

D. A mortar groove shall be provided on the exterior of the frame, centered on the frame depth.

E. Each modular unit shall be provided with an insect screen. Fabrication shall be extruded aluminum frames, corners mitered aluminum spline, and 16-18 mesh aluminum screen. Screens shall be fixed type, with aluminum clips and screens suitable anchored to the unit.

2.07 ELECTRICAL MATERIALS

A. See Section 16051 "Pump Station Electrical Materials".
B. See Section 16940 "Pump Station Control Panel".

2.08 TELEMETRY

A. A telemetry panel provided by the MD-WASD shall be installed in the future. All appurtenances required by the telemetry system shall be provided, including antenna, concrete filled galvanized steel pipe, concrete base, mounting clamps and accessories.

B. All lift stations shall be designed for fully automatic unattended pump control with local override capability. Lift stations shall also be designed for remote monitoring capability. Provisions for these installations shall be made by Engineer of Record. Remote monitoring will be installed by the MD-WASD.

2.09 FENCING MATERIAL

Fencing material shall be furnished and installed in accordance with Section 02822, "Chainlink Fences and Gate". Gates shall be positioned to allow for maintenance and direct truck access to the wet well.

2.10 PIPING AND FITTING MATERIAL

Piping, fittings and appurtenances shall be as specified in Section 15060, "Piping and Fittings". Sewage lined ductile iron pipe and fittings are required within the pump station.

2.11 LADDERS & GUARD CHAINS

A. Galvanized steel ladders shall be fabricated with structural shapes in accordance with Section 05120, "Miscellaneous and Structural Steel", and shall be sized in accordance with the Plans. All welds shall be ground smooth and cleaned to remove welding marks. All screws and bolts appurtenant to the ladders shall be AISI Type 316 stainless steel.

B. Guards chains shall be used where shown on the Plans. The chains shall be welded stainless steel close link hoist chain 3/8-inch by 1.2 inch X .540 inch links. One end of each chain shall be attached by a stainless steel shackle to a 3/8-inch round stainless steel eye bolt through the pipe stanchion and the other end of each chain shall be connected to a heavy stainless steel snap hook. A 3/8-inch stainless steel

welded eye and concrete insert shall be provided in the wall for both chains. The eyes shall be installed just below the bottom of the top and intermediate rails. Stainless steel items shall be AISI Type 316.

2.12 All other material required for the satisfactory installation of the pump station, including valves, sewage pumps, sump pump, steel reinforcing, structural steel, waterstops, miscellaneous material and other products, shall be as specified elsewhere herein.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

A. The precast base shall be set level, with the walls plumb on the graded crushed rock bedding.

B. Excavation shall extend to a level 12-inches below the level of the outside bottom of the base slab. If necessary, provide sheeting and shoring for the excavation. Sheeting and shoring may be required in order to control the excavation dimensions, protect the workmen, and prevent damage to the structure or other adjacent facilities. The resulting excavation shall be backfilled with drainfield limerock or specified pipe bedding material to a level to receive the structures at the proper elevation.

C. Necessary sheeting and shoring shall be designed by a Registered Professional Engineer licensed to practice in the State of Florida. Signed, sealed, and dated drawings and design calculations shall be submitted to the Engineer for approval prior to construction.

D. The excavation shall then be brought to the structure's bottom elevation by placing and compacting 6-inch layers of Oolitic limerock to 95% of maximum density as determined by AASHTO Specification No. T-180. Excess excavated material, suitable for the purpose, may be used later as backfill around the structure. The wet well, dry well and/or valve pit shall be painted prior to installation. Backfill around new structures up to the pavement base or surface of the ground shall be material not exceeding 6-inches in diameter and shall be compacted in layers not exceeding 9-inches. Each layer shall be compacted with a powered hand tamper or other approved method.

E. For surfaces of structures exposed to view the Contractor shall fill all depressions and all air holes with mortar, dampen surfaces, and then spread slurry, consisting of one part cement and one and one-half parts sand, by damp loose volume, on the surface with clean burlap pads and sponge rubber floats. The Contractor shall remove any surplus by scraping and hen rubbing with clean burlap. Finish surface shall be suitable to receive paint.

3.02 INSTALLATION OF PRECAST PUMP STATION

MDWASD

A. Excavations for the cast-in-place or the precast structures shall be extended to a level 6-inches below the level of the outside bottom of the slab. Sheeting and shoring may be required in order to control the excavation dimensions, protect workmen, and prevent damage to the structure or adjacent facilities. The resulting excavation shall be backfilled with drainfield limerock or specified pipe bedding material to a level to receive the structures at the proper elevation. Pump station exteriors shall be painted prior to installation.

B. Sheeting and shoring for the pump station shall be designed by a Registered Professional Engineer licensed to practice in the State of Florida. Signed, sealed and dated drawings and design calculations shall be submitted to the MD-WASD for approval prior to construction.

C. The pump station shall come with an anchor slab, precast to the dimensions shown on the Plans to be lowered in to the excavation separately, or as a complete unit. The structure, with anchor slab shall be securely seated.

3.03 INSTALLATION OF VALVE PIT STRUCTURES

A. During all backfilling operations the backfill level shall be kept even on all sides of the structure and the Contractor shall exercise every precaution to prevent damage to, or unplanned loading of, the structure or its appurtenances.

B. The valve pit structure shall be precast to the dimensions shown on the plans and carefully lowered into the excavation. The structure shall be seated securely to grade and to the approval of the MD-WASD, after which the Contractor shall complete the remainder of the installations.

C. After satisfactory installation and testing, the valve pit interior shall be painted as specified.

3.04 MECHANICAL WORK

A. The mechanical work shall be performed by personnel who have had previous experience installing similar pumping station equipment. All equipment shall be installed in complete accordance with the installation instructions pertaining to the various items of equipment as published by the equipment manufacturers and no piece of equipment shall be installed unless its installation instructions are on hand. Duplicate copies of these instructions shall be furnished to the Engineer of Record prior to installation. Before any installation work is started, the Contractor shall submit five copies of installation drawings to the MD-WASD for approval of all the proposed mechanical work. No work shall commence until approval of the installation drawings has been received.

B. All pipe, tubing, and fittings shall be adequately supported with adjustable pipe saddle supports, by wall brackets, or by ceiling hangers, as indicated on the drawings. Except as otherwise indicated or specified, all piping passing through walls or floors shall be provided with pipe sleeves or wall pipe as indicated on the Plans. Sleeves shall be caulked to piping on both sides of wall with Dow-Corning

790 joint sealant or approved equal. Sleeves and wall pipe shall be accurately set in the forms and blocked to prevent movement during pouring of concrete. Sleeves and wall pipe for piping 6 inches and larger shall be made of cast iron. Sleeves for piping smaller than 6 inches shall be cut from Schedule 40 galvanized steel pipe, reamed and set flush with both faces of wall or floor, or as shown on the Plans.

C. All pipe shall be thoroughly cleaned internally to the satisfaction of the MD-WASD before installation.

D. All pipe work under this Contract including handling of materials, excavation, laying, blocking, alignment and grade, jointing, setting valves and fittings, and anchoring, shall meet the applicable provisions of AWWA Specification C600, "Installation of Ductile-Iron Water Mains and Their Appurtenances", latest edition, as modified herein.

E. The Contractor shall furnish all nuts, bolts, washers, gaskets, foundation bolts, and all other items necessary to install the equipment specified herein. Foundation bolts shall be of a size recommended by the manufacturer of the equipment. All nuts, bolts, foundation bolts, and washers shall be hot-dip galvanized steel or stainless steel, as specified herein, or shown on the Plans.

F. Equipment shall be installed in a neat workmanlike manner in accordance with accepted practices. Alignment of pumping equipment shall be by a qualified millwright. Foundations and supports for equipment shall be poured to within one inch from finished elevation. The floor shall be thoroughly roughened by chipping where supports, foundations or bases are to be poured. Foundation bolts shall be located by templates which shall be left in place during the pouring of the concrete. The equipment shall be set and shimmed with steel wedges to the required finished elevation. The foundations shall be encircled by forms and the equipment grouted in, using epoxy grout, as specified herein. Rodding or other suitable means shall be used to assure that all voids have been filled. After the grout has set, the shims shall be removed and the resulting spaces filled with grout. After setting, this grout shall be trimmed to match the adjoining grouted surfaces. The matching surfaces of the grout and foundation on all pumps shall be rubbed with a carborundum brick to produce a smooth, even finish, satisfactory to the MD-WASD. Exposed corners shall be chamfered 1 inch.

G. The pumps and motors shall be placed in position and shall be perfectly aligned in accordance with the recommendations of the pump manufacturer, and to the satisfaction of the MD-WASD. Bolts shall then be tightened, and the alignment shall be rechecked. Alignment and checking shall be done in the presence of a MD-WASD representative.

3.05 STRUCTURAL WORK

A. All concrete work shall be constructed in accordance with all applicable provisions of Section 03300.

B. If, in performing the concrete work hereunder, the forms holding the concrete should fail, sag or get out of line in any way whatsoever, repair such damage to the

complete satisfaction of the Engineer. All completed members shall be straight and true, and present a uniform appearance. The use of excavation walls as forms will not be approved.

C. Concrete surfaces shall be inspected immediately after the forms are removed. Defective areas shall be chipped away to the depth of the imperfections but not less than one inch deep. These areas shall be kept wet for at least two hours before patching. Immediately thereafter, all the holes shall be brushed neat with cement grout. While the grout is still wet, the holes shall be filled with a barely moist grout consisting of one part Portland cement and three parts sand, which shall be driven tight with wooden caulking tools and finished off flush and smooth. The mortar patches shall be cured as specified.

D. The dry well floor and valve pit floor shall slope one inch from the farthest point to the sump.

E. Construct the foundations for the pumps and motors with non-shrink epoxy grout. The foundation shall include anchor bolts, nuts, washers, and sleeves as required for the equipment. Anchor bolts shall be in accordance with the equipment manufacturer's recommendations and as approved by the MD-WASD. The foundations shall be poured to heights of not less than one inch below the elevation required to bring the equipment to the correct elevation, leaving room for placing grout to maintain the equipment at the proper elevation. After the forms have been removed, the foundations above the floor line shall be rubbed smooth with a carborundum brick. Exposed corners shall be chamfered 1-inch. Anchor bolts, nuts, washers, and sleeves shall be hot dip galvanized.

F. The Contractor shall construct concrete foundations for the check valves, including felt paper lining. Foundation and supports shall be allowed to cure for at least 7 days before setting any equipment. The floor shall be thoroughly roughened by chipping where supports are to be poured. After the forms have been removed, the foundations above the floor line shall be rubbed smooth with a carborundum brick. Exposed corners shall be chamfered 1 inch.

3.06 ACCEPTANCE TESTING

A. The Contractor shall inform the City in writing that the station is ready for operation, and shall, in the presence of the City's representative, demonstrate the operability and correct adjustment of every device included in the Project. The Contractor shall furnish all gauges, testing devices, water to fill (and refill as required) the wet well, electric power, labor, and other necessities to demonstrate that the station is ready to be put into operation. All tests and/or demonstrations shall be conducted to the complete satisfaction of the City.

B. Testing of the different items of equipment shall be conducted as many times, and for as long as is necessary, to determine whether the various items meet Specifications. Discharge piping shall be tested for leaks under pump shut-off head condition. No leakage is allowed. All interior ductile iron piping except the pump-

suction piping shall be tested and made "drop-tight" under a hydrostatic test pressure of at least 100 psi. Sections of discharge piping which cannot be isolated by valving for full pressure tests shall be tested at system pressure with no leakage allowed. Pump suction piping and valves shall be made "drop-tight" when the wet well is flooded to the invert level of the gravity line entering the wet well.

C. The Pump Station shall be tested per pump manufacturer's recommendations, WASD Standards for Submersible/Centrifugal Pumps and in the manner described below:

1. Fill wet well with water.
2. For pump number one:
   - Check winding resistance and record readings.
   - Place the operating mode selector switch in the manual position.
   - Record voltage and amperages.
   - Take pump down time and document it.
3. For all subsequent pumps follow steps 1 and 2.
4. With water level below lead pump starting point place all pumps selector switch to automatic position and continue adding water to wet well as necessary.
5. Observe lead pump run.
6. Increase water flow into wet well for lag pumps to run.
7. Continue this process for all pumps.
8. Stop pouring water into wet well and observe as all pumps shut off at the pre-selected levels.
9. Return selector switch to the off position.
10. Allow well to fill up to verify that High level alarm is functioning.
11. Again, pump down well in manual operation until low alarm level is triggered but
12. before pump looses prime.
13. Disconnect Digital Level Controller and check that lead pump is turned "on" and "off" at the proper levels by Back-up controller operating with float switches.
14. If the above parts of the test show that any component is not operating as intended, make necessary adjustments and/or repairs and repeat steps one through thirteen, until the entire system operates trouble free.
15. Fill the wet well with water to the invert of the influent pipe. Leave it full of water for at least two hours. If the water level goes down, locate and repair the leak to the satisfaction of the Engineer. Repeat test to ensure absence of leaks.

END OF SECTION

SECTION 02615

CONCRETE PROTECTIVE LINER SYSTEM FOR PRECAST STRUCTURES

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. Furnish and install all labor, materials, equipment, and incidentals required to supply polypropylene, random copolymer (PP-R) concrete protective liner in the precast wet wells and manholes as required and as shown on the plans. The liner system shall be AGRU "Sure-Grip" PP-R Concrete Protective Liner, or approved equal polypropylene lining, as installed by U.S. Precast Corporation, Miami, Florida and Joelson-Taylor Concrete Products at Venice, FL, Deland, FL and other locations in this state.

B. PP-R concrete protective liner shall be designed and installed by the manufacturer of the precast structure to protect the structure's interior surfaces from chemical attack and microbial corrosion, and to facilitate the prevention of ground water infiltration. A watertight seal between the ring and cover, or access hatch, and the liner, must be incorporated into the design. Additionally, the liner must be sealed at the bottom of the concrete structure's wall with a waterstop assembly thermo-welded to the wall liner, or with continuous liner coverage over the top of the base slab. All construction joints must be sealed by extrusion welding the liner seams together to form a continuous and flexible seal between structure sections.

1.02 SUBMITALS

A. The contractor shall submit for review a detailed CAD shopdrawings for each type of structure to be used on the project. These drawings shall detail the precast structure, per the design specified for the project, and shall show the concrete protective liner's placement on the structure's interior wall surfaces, at the construction joints, at pipe and other conduit connections, and at the adjustment area between the precast structure and the ring and cover. A manhole frame sealing system, in accordance with Section 02620, may be used in lieu of liner at the adjustment area.

B. The contractor shall provide, upon request, detailed thermo-welding and weld testing procedures, and supply to the engineer, upon request, a copy of the liner manufacturer's certification of training for those personnel performing the welding.

PART 2 - PRODUCTS

2.01 PHYSICAL PROPERTIES

A. The PP-R liner shall be free of pores, pinholes, voids and foreign bodies. All anchoring studs shall be manufactured during the extrusion process in one piece with the sheet. No welding to attach the studs to the sheet or mechanical finishing work is permitted. All welding rod, profile strips, cap strips and polyester backed transition wrapping shall be manufactured from

the same resins by the same manufacturer. The liner manufacturer shall be ISO 9001 certified.

B. The characteristic values of the raw materials shall be as follows:

PROPERTY	TEST METHOD	UNIT	STD. VALUE
Density	ASTM D 792-86	G/cm^3	.898
Melt Flow Index	ASTM D 1238-88	G/10min	(190/5)
Heat Reversion	ASTM D 1637-83	%	< 2
Yield Stress	ASTM D 638-89	PSI	$\geq$ 2,900
Elongation of Yield	ASTM D 638-89	%	$\geq$ 10
Elongation at Break	ASTM D 638-89	%	$\geq$ 50
Fire Classification	UL 94		V2
Electric Conductivity			10^{13}
Resistance to Pull-Out	SKZ Test Directives	T/m^2 T/ft^2	30 3
Maximum Working Temperature		C. F.	90 degrees C. 194 degrees F.

2.02 CONFIGURATION

A. Studded PP-R liner sheets shall have a minimum design thickness of 2 mm (.079 inches) and have a minimum of 39 wedge shaped anchoring studs per square foot of liner. Minimum stud height shall be no less than 9 mm (.39 inches) with a minimum length of 14 mm (.55 inches). Anchoring studs must be capable of resisting continuous hydraulic backpressure, to a minimum of 40 feet of hydraulic backpressure, exerted between the interior wall of the concrete structure and the anchoring stud side of the protective liner.

B. Non-studded PP-R cap strips, used to bridge construction joints, shall have a minimum design thickness of 2 mm (.079 inches). Polyester backed non-studded PP-R transition sheets, used for the purpose of bonding PP-R to dissimilar materials, shall be attached to the PP-R sheet during the extrusion process.

C. The lining system shall be designed to be repaired, or modified, at any time during the design life of the system.

PART 3 - EXECUTION

3.01 INSTALLATION

A. The installation of the PP-R concrete protective liner into precast wet wells and manholes shall be accomplished only by a precast concrete manufacturer certified by the liner manufacture, with a minimum of five years of manufacturing experience, and a minimum of five years experience in the installation of corrosion resistant thermoplastic sheet liners in concrete structures. Upon request, the liner installer shall provide written certification that the installation is in accordance with the liner manufacturer's installation specifications.

B. Placement of the liner on forms shall conform to the liner manufacturer's written instructions. All shop and field welding shall be performed only by thermoplastic extrusion welders certified by the liner manufacturer. All field thermo-welding shall additionally be performed only by confined space trained, and certified personnel.

- END OF SECTION -

SECTION 02625

SANITARY SEWER MANHOLE INFILTRATION INSERT

PART 1 - GENERAL

1.01 SCOPE

. This section specifies sanitary sewer manhole infiltration inserts. Manhole inserts shall be furnished and installed in all new sanitary sewer manholes and all manholes to be rehabilitated as part of the Project.

PART 2 - PRODUCTS

2.01 GENERAL

The manhole infiltration inserts furnished shall be the product of firms which have been regularly engaged in the manufacture of such items for a period of at least five (5) years.

2.02 MATERIAL

A. All materials used in the manufacture of the infiltration inserts shall be highly resistant to corrosion from sanitary sewer atmospheres containing hydrogen sulfide and dilute sulfuric acid.

B. Infiltration insert body shall be manufactured of High Density Polyethylene meeting the requirements of American Society for Testing and Materials Standard D1248-84 (Reapproved 1989), APolyethylene Plastics Molding and Extrusion Materials@, Type III, Class A, Category 5 or stainless steel, when required by the Department.

C. Insert body thickness shall be a minimum of .125 inches. Inflow dish shall be one piece molded with structural ribbing members in the bowl area for extra structural integrity. Inflow dish is to have smooth radius molded edges for additional strength and prevention of cracking. The insert shall have a straight-side design to allow penetration of the manhole lid dropping through the clear opening of the manhole frame. The depth of the infiltration insert shall be a minimum of 5 inches from the smooth radius molded edge to the center of the bowl area. The insert shall be designed to provide a sufficiently loose fit into the manhole frame to allow easy removal. Manufacturers name and the date manufactured shall be molded into the inflow dish.

D. The infiltration inserts shall be dimensioned to fit sanitary sewer manholes as shown on the Miami Dade Water and Sewer Departments Standard Detail #SS4.0, “Type “A” Manhole cover and Frame” pages 1 and 2 of 2.

E. The gasket shall be a minimum of .5 inches wide and shall be a minimum thickness of .125 inches installed by the manufacturer and shall be envelope type, providing a seal on the lower side of that portion of the insert, which sits in the manhole frame. The gasket shall be closed cell Neoprene rubber and shall provide a watertight seal when installed. The gasket

shall be permanently attached to the insert by means of chemical bonding, (or waterproof adhesive). The maximum amount of leakage through the infiltration insert shall be five (5) gallons in twenty-four (24) hours.

F. Ventilation is provided by a vent hole on the side of the bowl.

G. A handle made of nylon webbing no less than one (1) inch wide, shall be located so that it does not interfere with the installation of the manhole lid, yet still provide for easy removal of the infiltration insert. Corrosion resistant fasteners shall be used to fasten the nylon webbing to the inflow dish. The handle shall be able to withstand a pull of at least 500 pounds before failure or separation from the insert body.

H. Bidders may be required to submit a sample inflow dish along with a complete detailed specification and certifications referenced in this document for evaluation.

I. The County reserves the right to perform its own testing procedures or to send any and all samples to any laboratory for analysis. On the basis of this testing and analysis, the County shall be the sole judge of the acceptability of the sample in conformance with the specifications and its decision will be final. Any sample submitted shall create an express warranty that the whole of the goods to be provided by the contractor shall conform to the sample submitted.

J. Five (5) year warranty against defects.

K. Insert shall be an “Inflow Defender” by USSI, LLC; Venice, FL; (941) 926-2646 or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Inserts shall be installed in accordance with the manufacturer recommendations.

B. The Department reserves the right to require installation of stainless steel inserts, as required.

C. Manhole frame shall be set so that the tops of the covers are flush with the adjoining pavement or ground surface.

- END OF SECTION -

SECTION 02822

CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.01 WORK INCLUDED

A. The work included in this Section consists of furnishing and installing a galvanized steel chain link fence, complete with gates and "V" arms with barbed wire, where permitted, to be constructed as shown on the Plans.

B. Minimum fence height shall be six (6) feet, with a double leaf entry gate having a minimum ten foot clear opening; except that if building and zoning codes permit, the fence and gate height shall be eight (8) feet.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Fabric:

The chain-link fence fabric shall meet the requirements of ASTM Standard A392, "Zinc-Coated Steel Chain-Link Fence Fabric", latest edition. Zinc coating of the fabric shall be not less than 2 ounces per square foot of wire surface (Class 2 coating). Fabric shall be one-piece fabric height as shown on the Plans, with 2-inch by 2-inch mesh of No. 9 gauge wire, unless otherwise specified. Top and bottom selvages shall be twisted. The fence shall have a single strand of 7 gage galvanized coil spring wire at the bottom, fastened at each post, and at 2 foot centers, with hog rings, extending to within 1-inch of the ground.

B. Posts and Other Appurtenances:

All tubular members including gate members shall comply with ASTM Standard A 53-90b, "Pipe, Steel, Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless, for Ordinary Uses", Type S Grade A or B, and shall be plain-end steel pipe, with zinc coating applied inside and out by the hot-dip process. Zinc coating shall be not less than 1.8 ounces per square foot of pipe area. Gate frames shall be hot-dip galvanized after fabrication. All fence posts shall have weather proof caps which shall conform with the specifications detailed elsewhere in this section. Fence components shall be as follows:

Components	Nominal Pipe Size	Outside Diameter	Weight Per Foot
Top rail and braces	1 1/4 inches	1.660 inches	2.27 pounds
Gate frames	1 ½ inches	1.900 inches	2.72 pounds
Line posts	2 inches	2.375 inches	3.65 pounds
Corner posts	2 ½ inches	2.875 inches	5.79 pounds
Gate posts (less Than 10 ft. leaf)	3 inches	3.500 inches	7.56 pounds
Gate posts (greater than 12 ft. leaf)	6 inches	6.625 inches	18.97 pounds

C. Top Rail: The top rail shall be provided with couplings approximately every 20 feet. Couplings are to be the outside sleeve type, at least 6 inches long.

D. Concrete: Concrete shall have a minimum compressive strength of 3,000 psi at 28 days.

E. Barbed Wire: Where permitted by building and zoning codes, the fence shall have six strands of barbed wire mounted on "V" arm post top extensions, as shown on the Plans. Barbed wire shall meet the requirements of ASTM Standard A121, "Zinc-Coated (Galvanized) Steel Barbed Wire", latest edition, for wire gage No. 12-1/2 (2 strands) with a minimum zinc coating of 0.5 ounce per square foot of wire surface (Class 2 coating), applied before fabrication. The individual barb shall be four points, twisted around both wires, with the barbs spaced no more than 5 inches apart.

F. Gates:

1. The gate frames shall be assembled by welding and shall be hot-dip galvanized after fabrication. The gate shall be installed complete with all hardware, including hinges, locking devices, drop bars, center stops, holdbacks and other items, as required. Padlock will be furnished by the Department.

2. The gate frame shall be made of 1-1/2 inch diameter Schedule 40 pipe and shall be welded at all corners so as to form a rigid one piece unit for each leaf. Fabric shall be securely stretched and held in the center of the tubing by use of hooks, bolts and tension rods on all four sides of the gate opening frame.

3. If permitted, the gate shall have three strands of barbed wire mounted on frame top extensions and barbed wire shall be as specified above.

4. Gates shall have a center stop and drop rod with padlock hardware and padlock. Gate stops and latches shall all be hot-dip galvanized.

5. Gate post shall be equipped with caps designed to exclude moisture from the post.

6. Gate posts shall be equipped with caps designed to exclude moisture from the post.

G. Accessories: Miscellaneous hardware shall be of steel, malleable iron or ductile iron of standard design and conform to the requirements of the Chain Line Fence Manufacturer's Institute. All parts shall be galvanized except ties and clips may be of aluminum. The Contractor shall install all of the hardware necessary for a complete and working installation, and shall include the following:

1. "V" Arms or Single Arm Post Extensions for Barbed Wire:

Barbed wire supporting arms shall form an angle of approximately 45 degrees with the vertical fence and be fitted for attaching three strands of barbed wire. The top wire shall project approximately 12-inches horizontally from the fence line. The other wires shall be spaced uniformly between the top of the fence

fabric and the outside strand. The barbed wire supporting arm shall be manufactured from pressed steel or malleable iron capable of withstanding 200 pounds applied at outer strand of barbed wire. It shall be designed as a combination weather-tight closure cap and a barbed wire supporting arm, where barbed wire is required.

2. Padlocking Device shall be a fulcrum type latch assembly for double gates.

3. Post Caps shall be of cast steel or cast iron and shall be designed to provide a drive fit over the top of the post to exclude moisture.

4. Tension Bars shall be one piece for the fence height of the fabric with a minimum cross-section of 3/16" x 3/4". Provide one tension bar for each end post, and 2 for each corner and pull post. The gate shall have tension bars as shown on the Plans.

H. Tension bars, the tension bar bands, post caps, V-arms, brace rods, top rail clamps, turnbuckles, nuts and bolts, all gate hardware and remaining accessories shall be zinc coated in accordance with the ASTM Standard A153 "Zinc Coating (Hot Dip) On Iron and Steel Hardware", latest edition.

I. Hardware: Miscellaneous hardware shall be of steel, malleable iron or ductile iron of standard design and conform to the requirements of the Chain Link Fence Manufacturer's Institute. All parts shall be galvanized except ties and clips, which may be aluminum.

PART 3 - EXECUTION

3.01 ARRANGEMENT

A. Posts: Post shall be uniformly spaced, not to exceed 10-feet on centers. Intermediate post shall have waterproof tops which have integrally cast openings through which the top rails shall pass.. Terminal posts shall consist of one end, corner and pull posts.

B. Braces: Braces shall be provided at each gate, corner, pull and end post.

C. Ties and Clips: Fabric shall be fastened to all intermediate posts with 9 gauge tie wires, spacing not to exceed 14-inches apart. Fabric shall be tied to top rail with 9 gauge tie wires, spacing not to exceed 24-inches on centers.

3.02 INSTALLATION

A. All posts shall be installed in accordance with ASTM F567, "Practice for Installation of Chain Link Fence", latest edition. Where conflict between said standard and these specifications exists, the more stringent shall apply.

B. Post Setting: Line posts shall be set in holes 12 inches in diameter, 38 inches deep with 36-inch post embedment. Terminal posts shall be set in holes 15 inches in diameter, 38 inches deep with 36-inch post embedment. Gate posts for double swing gates shall be set in holes 18 inches in diameter, 38 inches deep with 36-inch post

embedment. Gate posts for single swing gates shall be set in holes 15 inches in diameter, 38 inches deep with 36-inch post embedment. After the post has been set and plumbed, the hole shall be filled with concrete. The exposed surface of the concrete shall be crowned to shed water.

C. Terminal and Gate Posts: Terminal and gate posts shall be set as specified above and shall be braced to the nearest post with a galvanized horizontal brace used as a compression member and a galvanized 3/8-inch steel truss rod and truss tightener used as a tension member.

D. Fabric: Fabric shall not be stretched until concrete footings have cured a minimum of three days. Chain link fabric shall be placed on the side designated by the Engineer of Record and shall be stretched taut approximately 1-inches above finish grade and securely fastened to all posts. Rolls of wire fabric shall be joined by weaving a single strand into the ends of the rolls to form a continuous mesh.

END OF SECTION

SECTION 05540

ACCESS HATCHES

PART 1 - GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish and install access hatches, frames and accessories, where shown on the Drawings, and as specified herein.

1.02 QUALITY ASSURANCE

A. Codes: Access hatches shall conform with South Florida Building Code and OSHA requirements.

B. Manufacturer: Company specializing in manufacturing products specified in this section with minimum five years documented experience.

PART 2 - PRODUCTS

2.01 HATCHES

A. General:

1. Hatches for valve vault shall be aluminum when outside of the right-of-way and shall be steel when in public right-of-way. In all cases hatches shall be double door type designed for AASHTO H-20 wheel loads.

2. The access hatches shall have spring loaded covers for easy opening, recessed padlock and automatic 90-degree hold-open arms. Hatches shall be equipped with a flush drop handle which does not protrude above the cover. Hinges shall be all stainless steel with tamper proof stainless steel bolts and nuts, and shall be removable for maintenance after the access hatch is cast in place. Access hatches shall be furnished with a safety chain (double door leaf design). Access hatch shall have a stainless steel slamlock with removable outside handle and fixed inside release handle and shall be equipped with stainless steel compression springs.

3. When mounted, door leaf shall be flush with the top surface of the frame, with the exception of the projecting lugs. Hatches shall be of skid proof design.

4. Hardware shall be AISI Type 316 stainless steel. Aluminum used in the construction of the access hatches shall conform to Section 05140.

B. Valve Vault:

Valve vault hatch shall be Type AHD as manufactured by U.S.F. Fabrication, Inc., Hialeah, Florida, modified as specified herein, or approved equal.

C. For Submersible Pump Type Pump Stations:

1. Access hatches shall be U.S.F.F. Inc. Type AHD aluminum double door designed for AASHTO H-20 wheel loads, modified as specified herein, or approved equal.

2. Frame shall be furnished with upper guide holder, level sensors cable holder and stainless steel compression springs. Frame shall be securely placed and mounted above the pumps.

3. The access hatches shall have spring loaded covers for easy opening, keyed lock and automatic 90-degree hold-open arms. It shall be equipped with recessed lock and a flush drop handle which does not protrude above the cover. Hinges shall be all stainless steel with tamper proof stainless steel bolts and nuts, and shall be removable for maintenance after the access hatch is cast in place.

D. For Wet Well/Dry Well Type Pump Stations:

1. Access hatches shall be U.S.F.F. Inc. Type THD double door for the dry well and Type AHD single door for the wet well designed for AASHTO H-20 wheel loads, modified as specified herein, or approved equal.

2. Frame shall be furnished with stainless steel compression springs.

3. The access hatches shall have spring loaded covers for easy opening, keyed lock and automatic 90-degree hold-open arms. It shall be equipped with recessed lock and a flush drop handle which does not protrude above the cover. Hinges shall be all stainless steel with tamper proof stainless steel bolts and nuts, and shall be removable for maintenance after the access hatch is cast in place.

4. Frames shall be 1/4-inch thick minimum extruded aluminum with mitered and welded corners, and with strap anchors bolted or welded to the frame for embedment into the concrete slab. Frame depth shall be at least 2-1/2 inches below the horizontal top surface of the hatch doors. The exterior portion of the frames which will be in contact with the concrete, and the strap anchors, shall be painted with a factory applied bituminous coating. Run PVC pipe drain from frame to sump in dry-well.

PART 3 - EXECUTION

(Not Used)

END OF SECTION

SECTION 11205

SUBMERSIBLE (WASTEWATER) PUMPS

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install submersible non-clog wastewater pumps and appurtenances and place in satisfactory operation, in a workmanlike manner, all machinery, equipment, apparatus and accessories required for a complete installation in accordance with these specifications.

B. It is the intent of these Specifications to obtain complete and operable equipment. All items and accessories appearing in the Drawings, in the manufacturer's literature as standard, and all items specified herein, shall be included. Items not included herein or on the Drawings or manufacturer's literature, but which can be reasonably inferred as necessary for the equipment to be properly and legally operable, shall be included.

1.02 REFERENCES

A. This section contains references to the following documents. They are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

1.	ABMA 9-90	Load Ratings and Fatigue Life for Ball Bearings
2.	ABMA 11-90	Load Ratings and Fatigue Life for Roller Bearings
3.	ASTM A48-00	Gray Iron Castings
4.	ASTM A108-99	Steel Bars, Carbon, Cold Finished, Standard Quality
5.	ASTM A276-00a	Stainless and Heat-Resistant Steel Bars and Shapes
6.	ASTM A278-93	Gray Iron Castings for Pressure Containing Parts for Temperature up to 650 Degrees F
7.	ASTM A322-91	Steel Bars, Alloy, Standard Grades (1996)
8.	ASTM A576-90b	Steel Bars, Carbon, Hot Wrought, Special Quality (2000)
9.	ASTM A743/A743M-98a	Castings, Iron-Chromium, Iron-Chromium-

		Nickel, Corrosion-Resistances for General Application
	10. Hydraulic Institute	Standards of the Hydraulic Institute, (Current Edition)

1.03 SUBMITTALS

A. The Contractor shall submit the following after approval of drawings, but prior to construction of pump station:

1. Pump Drawings.
2. Pump performance curves, including other impeller sizes.
3. Predicted pump performance curves for each condition point specified in Part 2 showing head, power, efficiency and NPSH required on the ordinate plotted against capacity on the abscissa (x-axis).
4. Materials of construction.
5. Motor drawings
6. Complete electric motor data.

B. Submit in accordance with Section 01340, "Shop Drawings."

1.04 QUALITY ASSURANCE

A. Pumping units and accessories shall be the standard product of manufacturers which have produced and sold such pumps and appurtenances for a period of at least 5 years for similar service.

B. Spare parts shall be available from the manufacturer, not the vendor. All mounting, guides, and spare parts shall be supplied by the manufacturer.

C. The Department has identified area with ragging and clogging problems which require the use of submersible pumps that have been field tested in the Department’s system. The Department Approved Pumps in areas with rags and wipes issues shall have cutters or other features to successfully operate at the location with the severe clogging problems. Coordinate with the Department Engineer if the proposed pump is located at a severe clogging location.

D. Pump Materials of Construction: Any pumps submitted as an alternate shall meet the design curve and material construction of the specified pump to the satisfaction of the Engineer. Any submitted alternate shall be reviewed to verify that the Department will receive the same quality of grade of steel, epoxy coating, mating to the discharge elbow and resistance to corrosion.

1.05 PUMP WARRANTY

A. The pump manufacturer shall warrant the units supplied to the owner against defects in workmanship and materials for a period of 5 years or 10,000 hours of operation, in normal use, operation and service. The warranty shall be in printed form and shall apply to all similar units. A copy of the warranty shall be supplied

with each pump. The warranty shall consist of the following:

1. From 0 18 months or 0 - 3,000 hours, 100% warranty.
2. From 19 39 months or 3,001 6,500 hours, 50% warranty.
3. From 40 60 months or 6,501 10,000 hours, 25% warranty.

PART 2 PRODUCTS

2.01 PUMPS

A. Pump shall be totally submersible, non-clogging, electrically operated, designed specifically for use in municipal wastewater applications and capable of handling raw unscreened sewage. Pumping units shall be suitable for the allotted space shown on the Drawings and shall be satisfactorily suitable for the design conditions as determined by the City. Pump stations will be located in an area where clogging of pumps by debris in the sewer is expected. The proposed pumps shall be capable of passing debris without clogging (to the satisfaction of the Engineer).

B. Source: Provide pumping units by one of the following submersible pumps approved for use in the Water and Sewer Department system:

1. Xylem/Flygt;
2. ABS, with contra-block impeller;
3. Grundfos.

C. Design: The design shall be such that the pump unit shall be automatically and firmly connected to the discharge piping when lowered into place on its mating discharge connection. The pump shall be so designed that it may be lowered to or raised from its place in the wet-well by Type 316 stainless steel chain or cable and accurately guided by pipe guide bars extending from the top of the station to the discharge connection. The pump shall be guided by no less than two (2) separate Type 316 stainless steel guide rails of 2-inch minimum diameter for pumps of 29 or less horsepower; 3-inch minimum diameter for pumps between 30 and 100 horsepower and of 4-inch minimum diameter for pumps over 100 horsepower or other guide system as approved by the MD-WASD. There shall be no need for personnel to enter the wet-well.

D. Discharge Connection: Mating discharge connection of pump unit (aka Base Elbow) shall be permanently affixed to the concrete in the wet well with Type 316 stainless steel epoxy set anchor bolts furnished by and of the size recommended by the pump manufacturer. However, anchor bolts shall be 3/4-inch stainless steel, minimum. Sealing of the pumping unit to the discharge connection shall be accomplished by a machined metal to metal watertight contact. Sealing of the discharge interface with a diaphragm, O-ring or profile gasket shall not be acceptable. Provide a six-inch discharge for 20 HP and above.

E. Each pump with its appurtenances and cable shall be capable of continuous submersion under water without loss of water-tight integrity. Major parts such a

stator casing, oil casing, sliding bracket, volute and impeller shall be of cast iron ASTM A-48, Class 35B. All surfaces coming into contact with sewage other than stainless steel shall be protected by a coating resistant to sewage. All exposed bolts and nuts shall be Type 316 stainless steel.

F. The discharge connection (aka Base Elbow) shall be design and manufactured such that it will accept a Flygt CP or NP pump model. The base elbow shall be a product of the pump manufacturer and not a third party fabricator.

G. The pumps shall have a maximum weight of 1,500 pounds, as required to meet conditions described in these Specifications and design operating characteristics. The previously stated weight requirement supersedes any other weight listed elsewhere in these specifications. Pumps shall have a minimum efficiency of 50% at Best Efficiency Point (BEP).

2.02 COOLING SYSTEM

A. Motors shall be sufficiently cooled by the surrounding environment or pumped media. Cooling system shall provide for continuous operation in ambient temperatures up to 104^{o}F.

2.03 PUMP CONSTRUCTION

A. Material and Coating: The major pump components shall be ASTM A48, "Gray Iron Castings", Class 35B cast iron, with smooth surfaces devoid of blow holes and other irregularities; of sufficient strength, weight and metal thickness to insure long life, accurate alignment and reliable operation. All exposed nuts and bolts shall be Type 316 stainless steel. All surfaces coming into contact with sewage other than stainless steel shall be protected by an approved sewage resistant coating. The pump exterior shall be sprayed first with PVC epoxy primer. All remaining surfaces where watertight seal is required shall be machined and fitted with nitrile rubber "O" rings. Fittings shall be such that the sealing is accomplished by metal-to-metal contact between the machined surfaces.

B. Cable Entry Seal:

1. The cable entry water seal shall be designed to preclude specific torque requirements to insure a watertight and submersible seal. The cable entry shall be comprised of a cylindrical elastomer grommet flanked by stainless steel washers, all having a close tolerance fit against the cable outside diameter and the entry inside diameter and compressed by the entry body containing a strain relief function separate from the function of sealing the cable.

2. The cable entry junction chamber and motor shall be separated by a stator lead sealing gland or terminal board, which shall isolate the motor interior from foreign material gaining access through the pump top.

3. Cable entry assemblies utilizing an epoxy for sealing may be considered, on a case-by-case basis. Epoxy shall be locally and commercially available, and shall have maximum published cure time of six (6) hours at room temperature and shall be suitable for use in a municipal sewerage environment.

C. Impeller: The impeller(s) shall be of gray cast iron, Class 35B, dynamically balanced, single or double shrouded, non-clogging design having a long throughlet without acute turns. The impellers shall be capable of handling solids, fibrous materials, heavy sludge and other matter found in normal sewage applications. The impeller shall be of a single vane, 2 or 3 vane non-clogging design. Recessed impellers are not acceptable by the City. Impeller(s) shall be keyed to the shaft, retained with an Allen head bolt and shall be capable of passing a minimum 3-inch diameter solid sphere. One impeller tool shall be provided with each pump.

D. Wear Rings: A wear ring or wear plate system shall be used to provide efficient sealing between the volute and suction inlet of the impeller. Each pump shall be equipped with a brass, or nitrile rubber coated steel ring insert that is drive fitted to the volute inlet.

E. Volute: Pump volute(s) shall be single-piece gray cast iron, Class 35B, non-concentric design with smooth fluid passages large enough at all points to pass any solids that may enter the impeller.

F. Shaft and Mechanical Seal:

1. The pump and rotor shaft shall be the same unit. The shaft shall be ANSI Type 420 series stainless steel, or approved equal.

2. Each pump shall be provided with a tandem mechanical rotating shaft seal system. Seals shall run in an oil reservoir. Lapped seal faces must be hydro-dynamically lubricated at a constant rate. The lower seal unit, between the pump and the oil chamber shall contain one stationary and one positively driven rotating tungsten or silicon carbide ring. The upper seal unit, between the oil sump and motor housing, shall contain one stationary tungsten carbide or ceramic ring and one positively driven rotating carbon ring. The use of a positively driven rotating tungsten or silicon carbide ring is acceptable in lieu of the positively driven rotating carbon ring. Each seal interface shall be held in contact by its own spring system. The seals shall require neither maintenance nor adjustment, but shall be easily inspected and replaceable. Each pump shall be provided with an oil chamber for the shaft sealing system. The oil chamber shall be designed to prevent over-filling and to provide oil expansion capacity. The drain and inspection plug with positive anti-leak seal shall be easily accessible from the outside. The pump shaft shall rotate on 2 permanently lubricated bearings with a minimum L10 rating of 50,000 hours.

2.04 PUMP MOTOR

A. The pump motor shall be squirrel cage induction, shell type design, housed in an air filled, watertight chamber, no more than 60 HP and 1,800 RPM, 240/480 volts, 3 phase, 60 Hertz, 1.15 S.F., NEMA Type B. The stator winding and stator leads shall be insulated with moisture resistant Class F insulation which will resist a temperature of 155 degree centigrade. The stator shall be dipped and baked 3 times in Class F varnish. The motor shall be designed for continuous duty capable of sustaining a minimum of 12 starts per hour. Motors shall be approved for Class 1, Division II, Group D atmospheres in accordance with NEC classification for hazardous areas. Motors shall be able to start within the 1300% factor allowed by NEC 430-52 or documentation shall be provided as to why it cannot.

B. Each unit shall be provided with an adequately designed cooling system to permit continuous operation in totally, partially, or non-submerged condition. Cooling media channels and ports shall be sized to be non-clogging.

C. Motor bearings shall be permanently grease lubricated. Oil filled motors are not acceptable.

D. Thermal switches shall be embedded in the stator lead coils. All stators shall incorporate thermal switches in series to monitor the temperature of each phase winding. At 125 degrees C (260 degrees F) the thermal switches shall open, stop the motor and activate an alarm. These thermal switches shall be used in conjunction with and supplemental to external motor overload protection and shall be connected to the control panel. Wire nuts or crimping devices are not acceptable. The motor and pump shall be designed and assembled by the same manufacturer

E. The pump motor cable shall be suited for submersible pump applications with Underwriters Laboratory approval permanently embossed on the cable. Cable sizing shall conform to the National Electric Code Specifications for pump motors. Each pump shall be furnished with ample cable such that one continuous length of cable, supplied by pump manufacturer, will be all that is required to run from pump, when lowered in the wet-well, to the controls, without need of splices.

F. The motor horsepower shall be adequate such that the pump is non-overloading throughout the entire pump performance curve from shut-off through run-out.

PART 3 EXECUTION

3.01 INSTALLATION

A. All equipment shall be installed as shown on the Plans and in accordance with these specifications.

B. All motors shall be factory mounted by the driven equipment manufacturer in accordance with the motor manufacturers drawings and instructions. Field installation of the unit, including final alignment shall be the responsibility of the

Contractor.

C. Installation shall include furnishing all necessary appurtenances for initial operation and making final adjustments to place the equipment in operable condition.

D. All control and alarm wires, as required, shall be provided even if not shown on plan drawings.

3.02 PREPARATION FOR STORAGE

A. All flanges shall be covered to prevent damage. Pump motors, and shafts will be stored inside warehouses. Pumps may be stored outside, on wood members away from the ground, at sufficient elevation to prevent flooding, and protected from the weather by secured canvas or plastic coverings.

3.03 PUMP TESTS

A. The manufacturer shall perform the following inspections and tests on each pump before shipment from the factory:

1. Impeller, motor rating and electrical connections shall be checked for compliance with customer's purchase order.

2. Motor and cable insulation tests for moisture content or insulation defects shall be made.

3. Prior to submergence, the pump shall be run dry, to establish correct rotation and mechanical integrity.

4. Pump shall be run for 30 minutes submerged a minimum of 6 feet underwater.

5. After the operation tests, the insulation test is to be performed again. A written report, signed by a professional engineer, registered in the state where the tests were performed, stating that "A" through "D" (above) were performed and that the tests were satisfactorily accomplished, shall be supplied with each pump at the time of shipment.

3.04 FIELD QUALITY CONTROL

A. The supplier shall provide start-up service to place the pumps and controls in proper operation.

B. During this service, the Manufacturer’s Representative shall review the operation of the equipment and the pump and station will be inspected for proper installation and shall coordinate with Contractor and make recommendations.

C. The pumps shall be tested at start-up and the voltage, current and other significant parameters recorded. The manufacturer shall provide a formal test

procedure and forms for recording the data.

D. The supplier shall submit a written report to the Contractor, stating results of the start-up inspection. A copy of the report shall be furnished to the City. The Contractor shall inform the City 24-hours prior to commencement of such start-up services and tests. These services shall be at no cost to the City.

END OF SECTION

Revision #7, 5-2-2023
1.04 Quality Assurance added Paragraphs C and D
2.01 Pumps Paragraph B removed KSB Pumps from Products List

SECTION 11215

SUMP PUMP

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish and install sump pump and all appurtenances, as specified below, where shown on the plans or as required for a complete installation.

1.02 SUBMITTALS

The Contractor shall furnish full detailed manufacturer specifications, characteristic curves and shop drawings showing the make, model and descriptive data to the Department for the pump unit he proposes to supply. Submittals shall be approved prior to installation of pumping unit.

PART 2 - PRODUCTS

2.01 SUMP PUMPING UNIT

A. Sump pump in the dry-well shall be a submersible type with a cast iron or bronze housing, by Barnes, Covert Pump Division, or approved equal. Pump shall be rated for duty in conditions it shall be subjected to, including being totally submerged. Unit shall contain mechanical seal with rotating carbon face and stationary ceramic face. The motor shall be single phased, oil-filled unit, with overload protection and maximum ½-horsepower. However, sump pumps installed in dry wells ranging from 20 feet to 24 feet depths are excluded from this requirement and shall meet Department approval.

B. Sump in shall be sized per sump pump manufacturer's recommendation, but unless approved, not less than dimensions shown on the Department's Standard Pump Station Drawings. Dry-well sump shall include space for external float switch. Float switch shall be furnished with 10 feet cord and piggyback plug.

C. Where installed in valve-pit, sump pump shall be 1/3-horsepower, single phase, oil filled unit, with overload protection. Unit shall be Series BP27, by Barnes, or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

A. All equipment shall be installed as shown on the approved plans.

B. Installation shall include furnishing all necessary wiring, piping and other necessary appurtenances for satisfactory operation and making final adjustments to place the equipment in operable condition.

C. All power, control and alarm wires as required shall be provided even if not shown on plans.

D. Installation, testing and start-up shall be as recommended by the manufacturer provided specifications.

E. Dry-well Installation: Provide a sump and sump pump in the floor of the dry-well in a corner opposite the wet-well. Slop the floor from all directions toward the sump. The PVC pump discharge line shall contain two swing-disk type check valves and a gate valve, and shall be piped to the top of the dry-well before passing through the wall into the wet-well.

F. Valve Vault Installation: Sump pump and local motor starting switch shall be installed in the valve pit and hard-wired to the control cabinet. Manual motor starting switch shall be NEMA 3, 4X and 12, corrosion-resistant, dust-tight and watertight. It shall be Crouse-Hinds NSSC-D22, or approved equal. Discharge from pump shall be conveyed to the wet-well using 1-1/2 inch diameter PVC pipe. (The Department may consider approval of 1-1/4 inch diameter discharge piping as shown in the Standard Pump Station Drawings.)

END OF SECTION

SECTION 11500

FUEL STORAGE TANKS

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The work under this Section includes furnishing and installing above ground fuel storage tanks, with concrete bases, gauges, valves and piping, as required and as shown on Drawings; and other related items necessary for a complete installation, as indicated on the Contract Drawings.

1.02 RELATED SECTIONS

A. Section 02314 - Excavation, Backfill and Fill For Structures

B. Section 03300 - Cast-in-place Concrete, Reinforcing and Formwork.

C. Section 09900 – Painting

D. Section 16420 - Stationary Engine-Generator Set

E. Section 16425 - Portable Engine-Generator Set

1.03 REFERENCE, CODES AND STANDARDS

A. FDEP - Florida Department of Environmental Protection, Ch. 62-761 & 62-762, FAC

B. NFPA 30 - Flammable and Combustible Liquids Code.

C. NFPA 31 - Installation of Oil-Burning Equipment.

D. NFPA 70 – National Electrical Code (NEC)

E. NFPA 78 - Protection of Life and Property against Lightning.

F. FBC - Florida Building Code.

G. RER – Regulatory & Economic Resources Department, Miami-Dade County, Ch. 24-Miami-Dade County Environmental Code

H. U.L. Subject #2085 and #142.

I. UFC - ICBO Uniform Fire Code, Section 79 Appendix A-II-F

J. OSHA – Occupational Safety and Health Administration Standard 1910.23-1910.24

1.04 QUALITY ASSURANCE

A. Comply with the appropriate codes, regulations and standards referenced in paragraph 1.03.

1.05 SUBMITTALS

A. The fuel storage tank and accessories shall be FDEP approved and installation plans must have been reviewed and approved by RER/DERM.

B. Prepare and submit a site plan, drawn to scale, containing the following:

1. Show property lines and indicate occupancy or use of adjacent property.
2. Show streets, intersections and railroads.
3. Show buildings on the site and indicate type of construction. Show building openings on walls adjacent to tanks.
4. Show important utility lines, sewer, water, gas and electric including fire hydrants and catch basins.
5. Show any nearby waterways, streams, rivers, lakes or bodies of water.
6. Show any existing underground or aboveground tanks.
7. Show location of proposed tank and indicate shortest distance to buildings and property lines.

C. Prepare and submit detail drawings of tank, to include the following:

1. Tank type double-walled aboveground or underground storage tank (AST or UST), size, dimensions and spacing between adjacent tanks. Note: Miami Dade Water and Sewer Department requires aboveground tanks whenever possible.
2. Base slab dimensions and bollard location and size.
3. Vent size, height, location and type of cap.
4. Fill details including spill containment and overfill protection.
5. Piping details including shut-off/isolation valves and anti-siphon valve.
6. Pumps and other equipment, where applicable, including location, size and type.
7. Electrical details including shut-off switch location and grounding wire.
8. Level gauges and leak detection equipment. (i.e. Morrison Clock gauge for fuel level, Krueger Pop-up gauge for interstitial monitoring)
9. Signs and decals.

1.06 WARRANTY

The tank must carry a thirty year (30) warranty.

1.07 DELIVERY AND STORAGE

A. Deliver, store, protect and handle products under provisions of Section 01600.

B. Protect while transporting, storing, installing until work is completed.

C. Do not handle or move tank unless it is empty.

D. Do not drop or drag the tank.

E. Do not handle or install tank without having knowledge and experience in procedures involved with proper and safe installation of tank used for storage of stable, flammable and combustible liquids.

F. Equipment required for the shipping and off-loading of aboveground and underground storage tanks include lifting straps, forklift and crane up to 150 ton capacity and nylon tie down straps.

1.08 GENERAL FIRE PROTECTION

A. A sign which prohibits smoking shall be conspicuously posted.

B. Portable fire extinguisher shall be provided for the suppression of fires in accordance with NFPA 10 and UFC for high hazard area.

C. Exterior warning signs and labels shall be at proper location and configuration to meet applicable code requirements.

PART 2 - PRODUCTS

2.01 ABOVEGROUND TANKS

A. General:

The Contractor shall furnish an FDEP approved secondarily contained shop fabricated aboveground storage tank (AST) for flammable and combustible liquids. Storage tank system shall be UL listed for both vehicle impact protection and projectile resistant and shall be tested to and listed for the following:

1. UL - 142, aboveground steel tanks for flammable and combustible liquids.
2. UL – 2085, protected aboveground tanks for flammable and combustible liquids.

B. The tank shall be cylindrical in shape and have continuous welds on all sides conforming to the American Welding Standard for continuous weld. The primary and secondary tank shall be minimum 0.125 inch thick carbon steel and manufactured in accordance with U.L. 142. However, thickness shall be based on a thirty year (30) warranty.

C. The tank shall be designed and tested to provide 2-hour fire protection. The fire resistance of the tank shall be tested in accordance with the procedure established in U.L. 2085.

D. The primary steel tanks shall have "emergency vent" system as per NFPA 30 Code requirements.

E. The AST shall have a tank leak detector tube to allow for physical monitoring capability of the interstitial space between the primary and the secondary tank. A mechanical interstitial monitoring gauge (i.e., Kreuger Pop-Up) shall be installed.

F. The AST shall have a mechanical level gauge (i.e., Morrison Bros. Clock Gauge Model 818/818F).

G. The primary steel tank shall be pressure tested at 5 psig for 24 hours.

H. All openings shall be from the top only.

I. The AST shall have a coated exterior to resist weather and reflect sunlight.

J. The AST shall have a warranty of 30 years regardless of capacity.

K. The AST shall be constructed to allow for grounding in accordance with NFPA 78.

L. Tank shall be Fireguard Aboveground Tank or approved equal.

2.02 TANK CAPACITY

The tank capacity shall be as shown on Drawings. Minimum tank size shall be based on the fuel capacity required to run one pump continuously for five days, at maximum horsepower.

2.03 VENTING

A. Atmospheric Vent: The tank system shall be furnished with a 2-inch vent and an appropriate emergency vent. An open atmospheric utility vent cap shall be installed on the 2-inch vent line to protect against intrusion and blockage from water, debris or insects. Venting systems shall meet all 2-inch standard vent and emergency vent requirements of U.L. 142. Height of the vent line shall be per code. Vent line shall be capable of sufficient venting into the atmosphere in case of pressure build-up inside the tank. Vent cap shall be installed with no overhead obstructions to allow free flow of vapors from the vent.

B. Primary Tank Emergency Vent: The tank system shall be furnished with pressure relief nipples and emergency pressure relief devices to automatically relieve the pressure of the primary tank before it reaches 2.5 psig. It shall include a fire screen to prevent ignition from an external source.

C. Secondary Containment Venting Device: The tank system's secondary containment shall be furnished with an emergency venting device. The venting device shall consist of a pressure relief nipple and a relief device. The emergency device will open before the secondary containment internal pressure reaches 2.5 psig.

2.04 OVER SPILL CONTAINMENT

A. The AST systems shall include an FDEP approved over spill containment device.

B. Over spill containment device shall be mounted on top of the tank and shall surround the tank fill pipe to catch occasional spills.

C. A hand-activated spring-loaded normally closed valve shall be provided inside the containment to drain the spill back into the tank.

D. Lid to over spill containment device shall meet proper color–coding requirements for diesel fuel.

2.05 FILL PIPE

The tank system shall be furnished with a MNPT fitting for filling. The fill pipe shall be equipped with an adapter and lockable cap. Fill pipe diameter shall be 4-inches.

2.06 COLLISION PROTECTION

Collision protection approved by the tank manufacturer shall be located around tank perimeter for vehicular protection. Pipe bollards shall be installed for collision protection, as follows: concrete filled steel posts, 4-inches diameter (minimum) by 6 feet long, shall be set 3 feet into the ground within a 15-inch diameter concrete filled hole. Post shall be spaced 4 feet center to center and shall be spaced from tank in accordance local codes.

2.07 CONCRETE PAD

The tank system shall be installed on a reinforced concrete pad to protect against stresses from uneven settlement and to assure that the tank supports allow for inspection and maintenance beneath the tank. Concrete foundation (i.e, pad) shall have a minimum compressive strength in 28 days equal to 3000 psi. Pad length, width, thickness and placement specifications shall be as recommended by the manufacturer or engineer of record.

2.08 PIPING AND ACCESSORIES

A. All accessories (vents, product fill, etc.) shall be installed to meet the site specific requirements and governing codes.

B. Adherence to all operational safety precautions shall be taken under consideration and piping shall include safety valves as follows:

1. Angle check valve with pressure relief or foot valve and strainer. Foot valve and strainer shall be located 1-inch from the inside bottom of the tank.

2. Shut-off/isolation valve with fusible link on supply and return piping.

3. Anti-siphon valve (i.e., OPW Model # 199ASV) on the highest point of the supply line closest to the tank, if suction/supply line falls below the high fuel level.

4. Check valve in the return line.

C. Exterior warning signs and labels shall be properly located and meet applicable code requirements. Tanks shall be marked as required with warning signs: "FLAMMABLE" or "COMBUSTIBLE", "NO SMOKING", product identification, etc.

D. Exposed piping exterior surface shall be primed and coated with protective finish (i.e., Keeler and Long Tri-Polar Ferrite Primer and Rust-Oleum Industrial Acrylic Enamal 5225 (Royal “Safety” Blue) in a WASD approved safety blue color for diesel product.

2.09 ELECTRICAL

A. Electrical service and fuel piping to the pumps unit shall be installed in accordance with the requirements of NEC and NFPA and local code requirements.

B. All electrical devices used with or located twenty (20) feet of the tank shall conform to NFPA 70 Hazardous Locations. All electrical conduits and wiring connected to the tank shall be explosion proof and in strict accordance with NEC Class 1, Division 1.

C. Electrical grounding shall be installed on tank.

2.10 STAIRS AND CATWALKS

A. Install stairs/catwalks to facilitate access, inspections and maintenance services to the tanks as required.

B. Stairs shall comply with OSHA Standard 1910.24.

C. Railings shall be provided as required by OSHA Standard 1910.23

D. Stairs shall be 36” wide, straight-tread with top platform.

a. Top platform shall be 30” in direction of travel by 36” wide.

b. Top platform shall be 24”-30” below top of tank (excluding appurtenances).

E. Stair assembly shall be galvanized carbon-steel, free-standing with a 1”-3” clear gap between stairs and tank. (It shall not be in contact with tank or be supported by tank.)

PART 3 - EXECUTION

3.01 TANK SITE

A. The tank location and foundation shall comply with the all applicable local codes and ordinances.

B. Tanks shall not be located over underground utilities or directly beneath overhead power and telephone lines.

C. The tank shall be protected from vandalism and accidental damage in accordance with all applicable codes.

D. Fire department vehicle access should be provided within 150 feet of the tank.

E. The venting of the tank to a remote location must include the use of a steel pipe equal to or greater in size than the vent outlet. The methods of supporting such piping against displacement must comply with local codes.

3.02 FOUNDATION REQUIREMENT

A. The foundation for the tank shall be designed to support the tank plus 100% of the weight of the maximum amount of the product the tank will be storing. The foundation design shall also include provision for draining surface water away from the tank to minimize the risk of fuel accumulation from the over fill or spills at the tank footings.

B. The tank foundation (concrete pad) shall sit on compacted fill, free of organic material. The tank shall be installed on a continuous solid slab which will uniformly distribute the weight of the tank and its contents to the soil.

3.03 INSTALLATION OF ABOVEGROUND FUEL TANKS

A. General: The aboveground tanks shall be set on a concrete foundation (pad) in accordance with current installation instructions, foundation engineering drawings and shall comply with all governing code requirements.

1. Concrete Foundation (Pad): Reference and follow the appropriate manufacturer's or engineer of record’s drawings for the respective foundation size and load bearing requirements for pad lengths, widths, thickness, and placement specifications.

2. Unloading and Handling: A thorough inspection of the entire assembly shall be conducted prior off loading. Check for any damage, chipping or other impairments incurred during transportation. Do not remove the shrink wrapped plastic cover until after final installation of vents and piping. However, shrink wrap should be left on if installation is not to concur with delivery, as vault finish will be affected if shrinkwrapped and left exposed to sunlight for several days.

3. Equipment used to off-load: The equipment shall be adequate size and capability to lift the vault without dragging and dropping to ensure that no damage is done to the vault or its coating. The vault shall be lifted lowered, and secured only by use of nylon straps (chain and cables are not allowed) placed at designated lifting areas to avoid damage to the assembly.

4. The vault shall be anchored in accordance with applicable code requirements.

5. Air Pressure Test of Internal Steel Tank: Contractor shall verify the internal steel tank tightness during the process of placing the unit into service. Use the basic procedure and desired result as an unvaulted steel tank, and in accordance the industry standard procedures as published by the Steel Tank Institute or other professional organizations and manufacturer recommended procedures. Pressure test the tank at 5 psig. No leakage shall be permitted. Vaults under pressure shall not be left unattended.

END OF SECTION

SECTION 33 05 31.13 (15068)

PVC C900 SEWER FORCE MAINS

PART 1 GENERAL

1.01 SCOPE

A. This Section includes materials, installation and testing requirements of the Department for PVC C900 sewer force mains installed in its service area. Size range is 4 through 48 inches.

B. PVC C900 force mains are acceptable for use in areas with limited heavy vehicle traffic only. Not for use near gas stations or other sites which may have hydrocarbon contamination.

C. All PVC pipe used shall be of new or recent manufacturer. Pipe with surface discoloration will not be allowed.

D. Pipe Fittings shall be ductile iron.

E. Force mains 16 inch or larger shall be fully restrained the entire run of the pipe.

F. This Section does not purport to cover all material or installation procedures which may be required, whether by the nature of the proposed work, by the Department or by other regulatory agencies.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. The work shall proceed in accordance with the following specifications sections, bound herein:

1. Section 01 33 00 (UC-005) – “Project Approval”
2. Section 01 33 23 (01340) – “Shop Drawings”
3. Section 01 35 13 (01100) – “Special Project Procedures”
4. Section 01 35 26 (01016) – “Safety Requirements and Protection of Property”
5. Section 01 42 16 (01005) – “Defined Terms"
6. Section 01 55 26 (01750) – “Maintenance of Traffic and Use of Public Streets”
7. Section 01 71 23 (01031) – “Grades, Lines and Levels”
8. Section 02 00 00 (01011) – “Site Conditions”
9. Section 31 23 33 (02315) – “Trenching and Backfilling for Piping Systems”
10. Section 33 01 10.54 (02505) (UC-170) – "Cleaning and Testing of Mains"
11. Section 33 14 00 (15060) – “Piping and Fittings”
12. Section 33 31 23 (UC-750) – ”Sewer Force Mains”

1.03 QUALITY ASSURANCE

A. All material and installation shall be in accordance with the Department's Design and Construction Standard Specifications and Details and in shall be in full compliance with all applicable standards listed in Section 01 42 19 (01090) "Reference Standards" and this Section.

B. No deflection of joints is allowed for PVC pressure mains.

C. PVC pipe shall not be over-homed. Pipe installed below the water table where the homing mark is not visible shall utilize an over-insertion prevention device; EBAA Iron Mega-Stop Series 500; S&B Technical Product, RIG, Resistance Insertion Grip; or approved equal.

D. Pipe Embedment Material shall be class 1 backfill material with a maximum rock size of 3/4-inches.

1.04 SUBMITTALS

A. See Sections 33 31 23 (UC-750) ”Sewer Force Mains”, 33 14 00 (15060) “Piping and Fittings.”, 01 33 23 (01340) “Shop Drawings.”

B. Submit shop drawings in accordance with the Departments specifications or submit the Pre-Approved Product List Manufacturer.

C. PVC Pipe not on the Pre-Approved Products list shall supply the following:

1. Provide affidavit of compliance with AWWA C900.
2. Submit fully dimensioned cross-section of the bell and barrel of the pipe. Show the bell maximum outside diameter in the pressurized area and its minimum wall thickness at the same location.
3. Submit copies of the following manufacturer-required tests conducted on project pipe:
    a. Quick-burst strength of pipe and couplings.
    b. Flattening resistance of pipe.
    c. Record of additional tests after test sample failure.
4. Submit manufacturer's literature of gray iron and ductile-iron fittings including dimensions, thickness, weight, coating, lining, and a statement of inspection and compliance with the acceptance tests of AWWA C110 or C153. Submit copy of report of pressure tests for qualifying the designs of all sizes and types of AWWA C153 fittings that are being used in the project. The pressure test shall demonstrate that the minimum safety factor described in AWWA C153 is met.
5. Submit outline drawings and materials description of service connection saddles, corporation stops, and pipe plugs.
6. Submit test results for the restrained joint system to be used certified by an independent test laboratory demonstrating compliance with these

specifications for each size and pressure rating.

7. Submit restrained joint system installation instructions. Include bolt torque limitations and assembly tolerances.

1.05 MANUFACTURER'S SERVICE

A. Provide pipe manufacturer's services at the jobsite for the following minimum labor days, travel time excluded: One labor-day to instruct the Contractor's personnel in the preparation and execution of rubber-gasket and solvent-welded joints for the sizes of pipes to be installed in the project.

1.06 SAFETY REQUIREMENTS

A. See Section 01 35 26 (01016) “Safety Requirements and Protection of Property.”

1.07 DESIGN REQUIREMENTS

A. See Section 33 31 23 (UC-750) “Sewer Force Mains.” and Section 01 33 00 (UC-005) “Project Approval”

PART 2 PRODUCTS

2.01 GENERAL

A. See Section 33 14 00 (15060) “Piping and Fittings.”

2.02 CASTINGS

A. Castings shall be in accordance with Section 33 05 81 (05550) “Castings.”

2.03 EMBEDMENT MATERIAL

A. Embedment material, for bedding, haunching and initial backfill, shall conform with the requirements of Section 31 23 33 (02315) “Trenching and Backfilling for Piping Systems.”

2.04 PIPE

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. Pipe shall conform to AWWA C900, rubber-ring gasket bell end or plain end with elastomeric gasket coupling, cast iron equivalent outside diameter, material cell classification 12454 per ASTM D1784.

1. Pipe 4-inches through 30 inches DR 18
2. Pipe 36-inches through 42-inches DR 21
3. Pipe 48-inches DR 25

2.05 FITTINGS

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. Fittings shall be Zinc coated Ductile Iron and shall conform to AWWA C153 or AWWA C110.

C. Fittings shall be Lined and coated with fusion-bonded epoxy.

2.06 FLANGES

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. Flanges on outlets of fittings shall be Class 250 per ASME B16.1.

C. PVC flanges shall be of the one-piece solid socket design and shall be made of the same material as the pipe. Manufacturer’s pressure rating shall be at least 250 psi at a temperature of 73°F. Minimum burst pressure shall be 500 psi. Flanges shall match the dimensions of ASME B16.5, Class 250, steel flanges for outside diameter, bolt circle, and bolt holes. Do not use Van Stone flanges.

2.07 FLANGED COUPLING ADAPTERS

A. See Section 33 05 98 (15065) “Miscellaneous Materials.”

2.08 OUTLETS AND NOZZLES

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. All connections to PVC require a saddle.

C. For outlets larger than 2 inches, use a Ductile Iron tee with a flanged or MJ outlet.

2.09 RESTRAINED JOINTS

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. PVC Pipe 16 inch or larger shall be restrained at all joints for the entire run of the pipe.

C. Provide restrained joints where indicated in the drawings. Restrained joints shall be provided by restraining systems that incorporate a wedge restraint on the restraint ring to provide positive restraint.

D. Restraint devices for bell-and-spigot joints shall consist of a split restraint ring installed on the spigot, connected to a solid backup ring seated behind the bell.

E. Restraining Glands shall be EBAA Iron Series 2000 and 1600 or approved equal.

F. The ASTM A536 ductile iron casting of the restrained gland shall be bonded powder coated. The wedge and wedge assembly shall have a bonded liquid polymer coating

applied for corrosion protection. The gland shall utilize torque limiting twist off wedge actuation screws.

G. T-bolts, studs, and connecting hardware shall be high-strength, low alloy material in accordance with AWWA C111.

H. Design restraining devices to have a 2:1 safety factor based on the design strength of the pipe.

2.10 WYE STRAINERS

A. PVC wye strainers shall be manufactured of the same material as the pipe, with 30-mesh screens and Viton seals. Connecting ends shall be the socket type, solvent welded. Provide one spare screen for each strainer.

2.11 DETECTABLE TAPE/TRACER

A. Detectable tape/tracer approved for use by the Department are shown on Sheet number 10.2 of the Pre-Approved Product List.

2.12 MISCELLANEOUS MATERIALS

A. The Contractor shall furnish and install all miscellaneous material and appurtenances required for a complete installation. Section 33 05 98 (15065) “Miscellaneous Materials” specifies material necessary for a complete installation, not specified herein. These materials, including but not limited to the following, shall be installed when required, whether shown on the Plans or not.

1. Anchor Bolts, Bolts, Nuts and Washers
2. Blind Flanges
3. Corporation Stops
4. Gasket Lubricant
5. Joint Material for Flanged Pipe, Valves and Fittings
6. Stainless steel repair clamps, with stainless steel bolts
7. 90^{o} Street Elbows
8. Tie-Rods

2.13 SADDLES FOR CONNECTIONS TO SEWER FORCE MAINS

A. See Section 33 31 23 (UC-750) “Sewer Force Main.”

PART 3 EXECUTION

3.01 GENERAL

A. See Section 33 14 00 (15060) “Piping and Fittings.”

3.02 PRODUCT MARKING AND UNDERGROUND LOCATION

A. Legibly mark pipe at 5-foot intervals and each coupling to identify the nominal diameter, the outside diameter base, that is, cast-iron or steel pipe (IPS), the material code for pipe and couplings, the dimension ratio number, AWWA C900, and the seal of the testing agency that verified the suitability of the material for potable water service (NSF/ANSI 61).

B. Install 10 gauge tracer wire taped every four feet to the buried PVC pipe, a magnetic detection tape one foot above the buried PVC pipe and 3M compatible magnetic location ball markers two feet below grade every 100 feet or at any vertical and horizontal deflection point. See Pre-Approved product list Sheet 10.2.

3.03 DELIVERY AND TEMPORARY STORAGE OF PIPE

A. PVC shall be protected from UV degradation caused by extended exposure to direct sun. Pipe with surface discoloration shall not be installed and immediately removed from the project site. Tarps used to protect the pipe from sunlight shall be placed to allow for adequate ventilation to prevent heat build-up.

B. Ship, store, and place pipe at the installation site, supporting the pipe uniformly. Avoid scratching the pipe surface. Do not stack higher than 4 feet or with weight on bells. Cover to protect from sunlight.

C. Do not drag PVC pipe over the ground, drop it onto the ground, or drop objects on it.

D. Store loose pipes on racks with a maximum support spacing of 3 feet. Provide shades for pipe stored outdoors or installed outdoors until the pipe is filled with water. Store fittings indoors in their original cartons.

E. Store solvent cement indoors or, if outdoors, shade from direct sunlight exposure. Do not use solvent cements that have exceeded the shelf life marked on the storage container.

3.04 HANDLING PIPE

A. Hoist pipe with mechanical equipment using a cloth belt sling or a continuous fiber rope that avoids scratching the pipe. Do not use a chain. Pipes up to 16 inches in diameter may be lowered by rolling on two ropes controlled by snubbing. Pipes up to 6 inches in diameter may be lifted by hand.

3.05 INSTALLING BURIED PIPING

A. See Sections 31 23 33 (02315) “Trenching and Backfilling for Piping Systems” and Section 33 14 00 (15060) “Piping and Fittings.”

B. Bedding material and backfill to 1 foot above the pipe for PVC shall be well graded Class 1 backfill with a max rock size of ¾-inch compacted in 6-inch lifts. The minimum trench width shall be the pipe width plus 24-inches (12-inches on each side).

C. Before installation, check pipe and fittings for cuts, scratches, gouges, buckling, kinking, or splitting on pipe ends. Remove any pipe section containing defects by cutting out the damaged section of pipe.

D. Do not install PVC pipe when the temperature is below 40°F or above 90°F.

E. Do not install pipe that is gouged or scratched forming a clear depression.

F. Pipe shall be installed utilizing an over-insertion prevention device.

G. Install in accordance with AWWA C605, and as follows.

1. When installing pipe in trenches, do not deviate more than 1 inch from line or 1/4 inch from grade. Measure for grade at the pipe invert.

2. Backfill materials in the pipe zone shall be imported sand per Section 31 23 33 (02315) “Trenching and Backfilling of Piping Systems”. Do not add successive layers unless the previous layer is compacted to 90% relative compaction per ASTM D1557.

3. Compact material placed within 12 inches of the outer surface of the pipe by hand tamping only.

4. Compact trench backfill to the specified relative compaction. Do not float pipe. Do not use high-impact hammer-type equipment except where the pipe manufacturer warrants in writing that such use will not damage the pipe.

5. Install detector balls 2 feet below grade every 100 feet on straight lines, at any point changing direction, vertical or horizontal; in addition, install 10 gauge tracer wire taped every 4 feet to the buried PVC C900 pipe and a magnetic detection tape 1 foot above the PVC C900 pipe.

3.06 PIPE LAYOUT FOR CURVED ALIGNMENT

A. Pipe lengths shall not be bent for curved alignment.

3.07 ASSEMBLY OF RUBBER-GASKET PIPE JOINT

A. See Section 33 14 00 (15060) “Piping and Fittings.”

B. The spigot and bell or bell coupling shall be dirt free and slide together without displacing the rubber ring. Lay the pipe section with the bell coupling facing the direction of laying.

C. Insert the rubber ring into the groove in the bell in the trench just before joining the pipes. First clean the groove. Observe the correct direction of the shaped ring. Feel that the ring is completely seated.

D. Lubricate the spigot over the taper and up to the full insertion mark with the lubricant supplied by the pipe manufacturer. If the lubricated pipe end touches dirt, clean the pipe end and reapply lubricant.

E. Insert the spigot into the bell and force it slowly into position.

F. Check that the rubber ring has not left the groove during assembly by passing a feeler gauge around the completed joint.

3.08 CLEANING AND TESTING OF SEWER FORCE MAINS

A. See Section 33 01 10.54 (02505) (UC-170) "Cleaning and Testing of Mains."

END OF SECTION

SECTION 15115

CHECK VALVES

PART 1 - GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish and install check valves complete and operable, including all appurtenances and accessories.

1.02 RELATED WORK SPECIFIED ELSEWHERE

Section 15100 - Valves, General

PART 2 - PRODUCTS

2.01 CHECK VALVE

A. General

1. The swing-check valves shall be standard (plain), outside lever-and-weight or outside lever-and-spring types, for normal horizontal installations, conforming to all of the applicable requirements of the most current ANSI/AWWA Standard C508, "Swing-Check Valves for Waterworks Service, 2-in. Through 24 In. NPS", except as otherwise specified herein. The valves shall be iron body, bronze mounted and suitable for buried service.

2. Valve bonnet opening shall be large enough to allow ample clearance for direct removal of disc by hand.

B. External Ferrous Items

All external ferrous items, except cast iron, shall be hot-dipped galvanized in accordance with the most current ANSI/ASTM Standard A123, "Zinc (Hot-Galvanized) Coatings on Iron and Steel Products", or ANSI/ASTM Standard A153, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware", or stainless steel.

C. Flanged Valves

Flanged valves shall have ends plain-faced and drilled conforming to ANSI Standard B16.1, "Cast Iron Pipe Flanges and Flanged Fittings", Class 125. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerline. All joint materials for flanged valves will be furnished with the valves; neoprene for sewer and SBR for water applications.

D. Clapper

1. The clapper shall swing clear of the waterway when the valve opens, permitting a full flow through the valve equal to the nominal diameter of the pipe.

2. The body and clapper seating surface shall be metal to metal, and shall be bronze.

3. The clapper disc and the clapper hinge arm, including the clapper disc cap screw, shall be bronze or cast iron. Clapper to hinge arm connection shall be such that the unit cannot be unscrewed by fluid flow.

D. Clapper Hinge Pin

1. The clapper hinge pin (shaft) shall be stainless steel conforming to AISI Type 316. For check valves with outside levers, the clapper hinge pin shall rest in bronze bushings and shall extend through the casing on the right hand side when facing the valve inlet.

2. The clapper hinge pins shall rest in bronze bushings provided with a compression packing or double nitrile o-ring seal and shall extend through the casing on the right hand side when facing the valve inlet. An opening shall be provided in each of two bosses on the body for easy access to either end of the hinge pin. The openings shall be tapped and provided with plugs.

E. See Part 2 of Section 15100, "Valves, General", for other components.

2.02 TESTING

All check valves shall be tested at the factory in accordance with Section 5.2 of the most current ANSI/AWWA Standard C508 and a Certified Test Report shall be furnished with each valve.

PART 3 - EXECUTION

3.01 GENERAL

All valves shall be installed in accordance with provisions of Section 15100, "Valves, General." Care shall be taken that all valves are well supported.

END OF SECTION

SECTION 15120

GATE VALVES

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install gate valves complete and operable, including all appurtenances and accessories.

B. The City will permit the use of resilient seated type gate valves in potable water systems, as described herein. Such use shall be restricted to potable water systems of nominal sizes 4-inch through 48-inch. All other size or system applications shall be allowed only if reviewed and approved by the City. Resilient seat gate valves shall only be used in sewer applications where cover depth is sufficient to mount the valve in the vertical position and only with review and approval of the City. Sewer lines may not dipped or lowered in close proximity to a gate valve for the purpose of providing said cover. Resilient seat gate valves used as tapping valves in sanitary sewer systems and laid upon their side shall be left open when the line is placed in operation and backed up with a plug valve to provide flow control.

1.02 RELATED WORK SPECIFIED ELSEWHERE

Section 15100 - Valves, General

PART 2 - PRODUCTS

2.01 GATE VALVES, GENERAL

A. As used herein, "ANSI" denotes the American National Standards Institute; "AWWA" denotes the American Water Works Association; and "ASTM" denotes the American Society for Testing and Materials.

B. All valves specified herein, whether manufactured under the provisions of AWWA C515, latest revision "Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service" shall be furnished with an Affidavit of Compliance from the manufacturer as required by Section 6.3 of AWWA C515 latest revision.

C. The MD-WASD requires that suppliers shall submit with their proposals, if bidding on valve sales to the City; or shop drawings, if supplying valves to the City for contract or donations work; all data as listed in the "Data to Be Supplied by the Manufacturer" Sections of the referenced standards. This material is Section 4.1 in C515, latest revision and is identical. Data to be furnished is as follows:
"*Catalogue Data.* The manufacturer shall supply catalogue data, including illustrations and a parts list that identifies the materials used for various parts. The information shall be in sufficient detail to serve as a guide in the assembly and disassembly of the valve and for ordering repair parts.
Weight information. The manufacturer shall provide a statement of the net assembled weight for each size of valve exclusive of joint accessories.

Assembly Drawings. The manufacturer or supplier shall submit to the purchaser one set of drawings showing the principal dimensions, construction details, and materials used for all parts of the valve. All work shall be done and all valves shall be provided in accordance with these drawings after the drawings have been reviewed and accepted by the purchaser."

In the quotation above, the word "purchaser" shall be construed to mean the Miami-Dade Water and Sewer Department in either direct purchase or contract/donations situations.

D. All work performed according to the standards cited above, except prototype testing, shall be subject to inspection and acceptance by the City or its representatives who shall have access to all places of manufacture where these valves are being produced and tested. Suppliers shall, with their shop drawing submittals, submit the company name and location of the actual manufacturer of the valve which shall include Country, City, and street address of the manufacturer. Where valves are not domestically produced and tested, the City reserves the right to require that the Affidavit of Compliance be signed and sealed by a Professional Engineer, licensed to practice in the state of where the importing firm is located or the State of Florida. When this is required, the City's decision as to its necessity shall be final and no extra compensation will be allowed.

E. All valves shall conform with ANSI/NSF Standard 61, "Drinking Water System Components-Health Effects".

F. Grades B and C bronze as listed in Table 1 of AWWA C500, latest revision shall not be used in the fabrication of any of the various valve types listed in this specification. Aluminum bronzes, if used, shall not dealuminize and the method of preventing this shall be fully described in the submittal.

G. AWWA Standard C515, latest revision lists a number of copper alloys for valve stems and gates. Of these the City will accept alloys with the following Unified Numbering Series (UNS) numbers; C66100, C87600, C99400 and C99500. This same standard lists other copper alloys for Stem Nuts and Gates. Of these the MD-WASD will accept alloys with the following UNS numbers; C83600, C83450, C95200, C95500, C95800 C99400 and C99500.

H. Other copper alloys not listed in the standard may be used but must meet the performance requirements of the Standard, including but not limited to, minimum yield strength, chemical requirements and corrosion. The City requires that alloys containing more than sixteen (16) percent zinc shall not be used.

2.01 RESILIENT SEATED GATE VALVES

A. Resilient-seated gate valves shall be manufactured in accordance with the applicable provisions of the most recent ANSI/AWWA Standard C515, latest revision “Reduced-Wall Resilient-Seated Gate Valves for Water Supply Service” as modified herein.

B. Valves shall have non-rising stems (NRS) and are to be installed under buried and/or submerged conditions. The design working water pressure shall be 250 psig for 3 48-inch sizes. For valves manufactured in conformance with the provisions of AWWA C515, latest revision as modified herein, the design working water pressure shall be a minimum of 200 psi for all sizes. In addition to the pressure requirements, the valve assembly and mechanism shall be capable of withstanding an input torque of 200 ft.lbs. for valves 4-inch and smaller, and 300 ft. lbs. for valves

6-inch and larger. With the valve open the unobstructed waterway shall have a diameter not less than the full nominal diameter of the valve.

C. Valve body: Valves manufactured in conformance with AWWA C515, latest revision shall be iron-bodied and shall conform to ASTM Standard A395-99, "Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures" or ASTM Standard A536-84 "Ductile Iron Castings". Body and bonnet thickness shall conform with the requirements of AWWA Standard C515 latest revision.

All ferrous metal items in contact with the line fluids, except gray or ductile cast iron, shall be AISI Type 316 stainless steel. Valve body and bonnet gaskets shall be rubber or rubber composition, inorganic mineral fiber and paper are not acceptable. Rubber and rubber composition materials shall be suitable for use in water containing chlorine or chloramines and in sanitary sewage.

D.. Stems, stem nuts, glands and bushings shall be made of bronze as specified in ANSI/AWWA Standard C515 latest revision with no Grades B or C bronze being utilized. The same items for valves made in conformance with C515 latest revision shall be made of the alloys specified above in the last paragraph of the "Gate Valves, General" section of this specification. The stem diameter shall conform to Table 4 of C515 latest revision. All valves shall be equipped with an ANSI/AWWA standard 2-inch square operating nut with skirt, or handwheel when required for above-ground service. Valve stems shall rotate counterclockwise to open. All valves 20-inch and larger shall be equipped with gearing conforming to AWWA standard. Bevel or spur gearing shall be supplied as ordered with no cost differential.

E. "O"-ring stem seals shall be neoprene, Buna-N, or approved equal. No natural rubber compounds will be acceptable. The stem seals shall be of design that permits the replacement of the "O"-ring seals while the valve is in service, without undue leakage.

F. All external ferrous items, except gray or ductile cast iron, shall be hot dipped galvanized in accordance with ASTM Standard A123, "Zinc (Hot-galvanized) Coatings on Iron and Steel Products", or ASTM Standard A153, "Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware", or Type 304 stainless steel.

G. Resilient seats shall be applied to the disc only and shall seat against a corrosion-resistant surface. The surface may be either metallic or nonmetallic, applied in a manner to withstand the action of line fluids and the operation of the sealing gate under long-term service. A metallic surface shall have a corrosion resistance equal to or better than bronze. A nonmetallic surface shall be in compliance with ANSI/AWWA Standard C550, "Protective Epoxy Interior Coatings for Valves and Hydrants". Resilient seats shall be bonded to the gate. No natural rubber products will be acceptable. If the resilient seat is a rubber material, the method used for bonding or vulcanizing shall be proven by ASTM Standard D429, "Test Methods for Rubber Property-Adhesion to Rigid Substrates", Method A or B. For method A, the minimum strength shall not be less than 250 psi. When Method B is applicable, the peel strength shall not be less than 75 lb/in. All exposed mechanical attaching devices and hardware used to retain the resilient seat shall be of AISI Type 316 stainless steel.

H. Flanged valves shall have ends faced and drilled conforming to ANSI Standard B16.1, Class 125. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerlines. Joint materials for flanged valves will be furnished with the valves.

I. Mechanical joint valves shall have ends complying with ANSI/AWWA Standard C111/A21.11, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings". Mechanical joint gaskets, glands, tee-head bolts and hex nuts shall be included with the valve. Segmented glands or follower glands held in place with set screws will not be acceptable. Bolt holes in the flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers. Valves for use in sewage shall have neoprene gaskets.

J. Painting and coatings shall conform to the requirements of Fed. Spec. TT-C-494a on exterior ferrous surfaces, and ANSI/AWWA Standard C550 for the interior of the valve. A coating shall be applied to all ferrous parts of the valves except for finished or seating surfaces. Surfaces shall be clean and dry before painting.

K. Testing: All production tests shall be performed on all valves supplied without exception. Operation, shell and seat tests shall be performed as specified in Section 6.2 of AWWA C509 latest revision and Section 5.1.2 of AWWA C515, latest revision as appropriate to the standard which covers the valve in question. An Affidavit of Compliance as specified in paragraph two of the "GATE VALVES, GENERAL", section above, shall be furnished to the MD-WASD with the invoice for the valves. Final payment (prior to installation in donations situations) by the MD-WASD will not be made until after receipt of these Affidavits of Compliance.

The gate valves shall conform to AWWA C515, latest revision standard as modified herein and as manufactured by American Flow Control, Mueller or approved equal.

L. Resilient Seated Gate Valves installed in the horizontal position with bevel gearing shall require a flushing port on the side of the valve to clean the tracks. See the Standard Detail WS 4.70 for piping and ball valve installation requirements.

2.03 TAPPING VALVES

A. Tapping valves shall conform to the applicable requirements for the gate valves specified above herein, and also with the requirements listed below.

B. With the valve open, an unobstructed waterway shall be provided, the diameter of which shall be at least the full nominal diameter of the valve, to permit taps to be made through the valve.

C. Tapping valves shall have a mechanical joint outlet end conforming to ANSI/AWWA Standard C111/A21.11-90, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings" or a flanged outlet conforming to ANSI Standard B16.1 Class 125 (as called for in the particular valve order), for connection to new piping and a flanged inlet with centering ring (for all valves of 12-inch diameter and smaller and for all larger valves where the manufacturer produces a centering ring flange in that size), for connecting to the tapping sleeve. For tapping valves 12-inch and smaller, the sleeve shall be in compliance with all applicable provisions of MSS Standard Practice SP 60, latest revision, as developed and approved by the Manufacturers Standardization Society of the Valve and Fittings Industry, 127 Park Street N.E., Vienna, Virginia 22180. For tapping valves larger than 12-inch, the connecting flanged joint between the tapping sleeve and the tapping valve shall be industry standard; however, the tapping valve must provide a matching fit with tapping sleeves by other manufacturers.

D. The tapping valves shall be furnished complete with all joint materials. Joint materials for the flanged inlets shall be ANSI-sized and approved and shall include 1/8-inch thick full faced gaskets and hot-dip galvanized carbon steel bolts and nuts with internal threads tapped or retapped after galvanizing or stainless steel bolts and nuts. The flanged inlet gaskets shall conform to the gasket material and property requirements set forth in ANSI/AWWA Standard C111/A21.11-90. All pipe connection gaskets for use in sewer applications shall be neoprene and natural rubber shall not be used in any application. Seal shall be neoprene, Buna-N, Nitrile, EPDM or approved equal, but not natural rubber. The mechanical joint outlets shall include the necessary joint materials conforming to the requirements of joint materials for mechanical joint ended gate valves of the appropriate type specified above herein (neoprene for use with sewer). Bolt holes in the flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers.

E. Valve operators for tapping valves 20-inch and larger shall be located to the right or left (when looking into the mechanical joint outlet end) as ordered by the City.

F. The valves shall be suitable for use with ductile-iron pipe conforming to ANSI/AWWA Standard C151/A21.51-96, "Ductile-Iron Pipe, Centrifugally Cast, for Water", with wall thickness and outside diameter as specified in Tables 3 and 4, (Special Thickness Classes) for the following sizes:

Size	Thickness Class
4-inch	54
6-inch	53
8-inch	52
10-inch and larger	50

and with wall thicknesses and outside diameter as specified in Tables 1 and 2 (Standard dimensions and weights) of the same standard.

Pressure Class Pipe (Potable, Reuse and Raw Water Only)

Size	Pressure Class
4-inch through 12-inch	350
14-inch through 20-inch	250
24-inch	200
30-inch through 48-inch	150

G. All production tests shall be performed on all valves supplied without exception. Operation and hydrostatic tests shall be performed as specified in AWWA C515, latest revision. An Affidavit of Compliance as specified in paragraph two of the "GATE VALVES, GENERAL", section above, shall be furnished if requested to the City prior to installation of the valves. Final payment (installation in donations situations) by the City will not be made until after receipt of these Affidavits of Compliance.

The tapping valves shall conform with the appropriate AWWA valve standard as modified herein and as manufactured by American Flow Control, Mueller or approved equal.

PART 3 - EXECUTION

3.01 GENERAL

All valves shall be installed in accordance with provisions of Section 15100, "Valves, General." Care shall be taken that all valves are well supported.

END OF SECTION

SECTION 16051

PUMP STATION ELECTRICAL MATERIALS

1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install all electrical material specified herein and required for a complete installation.

1.02 RELATED SECTIONS

A. Section 16940 - Pump Station Control Panel

1.03 QUALITY ASSURANCE

A. All electrical materials and equipment shall be new, of recent domestic manufacture, and approved by the Underwriters' Laboratories, Inc. Material or equipment damaged in the course of installation or test shall be replaced or repaired in a manner meeting with the approval of the Engineer.

B. All electrical material and installation shall comply with the following codes and standards:

1. National Electrical Code (NEC)
2. South Florida Building Code (SFBC)
3. National Fire Protection Association (NFPA)
4. Insulated Power Cable Engineers Association (IPCEA)
5. National Electrical Manufacturers Association (NEMA)
6. Institute of Electrical and Electronic Engineers (IEEE)
7. American Society for Testing and Materials (ASTM)
8. American National Standards Institute (ANSI)
9. Underwriters Laboratories (UL)

1.04 SUBMITTALS

A. Before any material or equipment is purchased, the Contractor shall submit complete shop drawings to the Engineer for approval, including a complete list in quintuplicate of electrical materials, fixtures and equipment to be incorporated in the work. The list shall include catalog number, diagrams, drawings, and such other descriptive data as may be required by the Engineer. Approval of material will be based on the manufacturer's compliance with the Specifications, published ratings, or on test results, where specified.

B. In addition, the Contractor shall furnish four copies, in booklet form, of complete installation drawings, instruction books, operating and maintenance manuals, parts lists for each major item of electrical equipment, and similar data on minor items of equipment, if requested by the Engineer, dimensional drawings, wiring diagrams and schematics for each major piece of electrical equipment.

2 PRODUCTS

2.01 GENERAL

A. All equipment shall be new, complete and in operating condition unless otherwise specified.

B. All components shall, whenever possible, be standard stock articles of well known domestic manufacturers, who have been regularly engaged in the manufacture of such material and equipment for at least five years.

C. Fusible equipment shall be equipped with fuses, and 100 percent of spare fuses of each type shall be supplied.

2.02 SURGE PROTECTION

A. Line-to-line and line-to-ground protection shall exceed the requirements of ANSI/IEEE Standard C62.1-1984 Sections 8.6.1 and 8.7.3 by a factor of at least 300%. Voltage clamping time shall be less than five nanoseconds with a maximum surge current of 30,000 RMS at a clamping voltage under 600 VAC. One arrestor, complete with circuit breaker disconnect is to be supplied on the incoming line to the control system. Arrestors shall be Ingram Products, Joslyn or approved equal.

2.03 PHASE MONITOR

A. Phase Monitor shall be a three-phase monitor and supplied on the incoming line. The phase monitor shall prevent motors starting on the following conditions: overvoltage, undervoltage, phase reversal, phase imbalance and loss of phase. The phase monitor shall have integral fault light and dry contact for alarm indication. The unit shall be ATC Diversified Electronics or approved equal.

2.04 GROUNDING, BONDING AND GROUND RODS

A. Ground Rod shall be a copper-clad steel rod, 3/4-inch diameter by 15 feet long, approved for that use.

B. Make inaccessible or underground connections with the exothermic welding process using equipment manufactured by Burndy or Erico Products.

C. Make accessible connections with multiple bolt silicon bronze connectors specifically designed and approved for the purpose. Connectors to be as manufactured by Burndy or O.Z. Gedney Electric.

D. Install grounding system as shown on Drawings and never use a neutral conductor as grounding or bonding means.

E. Drive ground rods full length into the earth. Main ground electrode system resistance to ground to be no greater than 3 ohms. Use as many rods as needed to attain this level.

F. Ground and bond panelboard frame, fittings, fixtures and devices, cable sheaths and screens, neutral of transformers, boxes and raceways, motor frames, non-current carrying parts of appliances and devices, control equipment and panels, and all other parts and equipment as required by the NEC.

G. Provide every branch circuit for power and lighting and each 120-volt receptacle circuits, with a green grounding conductor of the same size and type as the power conductors installed in the same raceway.

2.05 CABLE AND WIRE

A. Cable and Wire shall be plainly marked with the manufacturer's name, year of manufacture, and type of cable. All conductors shall be copper unless otherwise specified.

B. All cable shall be manufactured in strict accordance with the specifications and the applicable IPCEA, NEMA, IEEE, UL, and ANSI standards, by a manufacturer with at least 5 years of experience in cables of this type.

C. All cable and wire shall be suitable for wet locations.

D. All 600 volt class cable shall be Class B, heat and moisture resistant thermoplastic type THW rated 75° C, maximum conductor temperature in wet or dry locations, with copper conductors. No. 10 and smaller shall be single strand, No. 8 through No. 2 shall be 7 strand and No. 1 through 4/0 shall be 19 strand and 250 MCM through 500 MCM shall be 37 Strand. Insulation shall meet UL Standard 83.

E. All conductors shall be plainly marked on outer braid at least every two feet with name of manufacturer, size and grade of insulation.

F. Conductors shall be as manufactured by General Cable, Phelps Dodge, Okonite or approved equal.

2.06 CONTROL WIRING

A. Wiring for monitoring system and control shall be single conductor #14 AWG minimum, solid or stranded with THW or THWN insulation.

B. Wiring for analog or pulse systems shall be 3-conductor shielded cable with #14 AWG stranded copper conductors with individual thermoplastic color-coded insulation. Overall shield shall be either copper or aluminum tape providing 100% shielding coverage and provided with a stranded copper ground drain wire and an overall vinyl jacket. Cable shall be Belden, Dekoron or approved equal.

C. Fireproofing tape shall be Irvington No. 7700, or approved equal, applied in accordance to the manufacturer’s instructions.

D. Multiconductor cable shall be copper conductors, flame retarded ethylene-propylene insulated for 600 V with a 90ºC rating. The single conductors of the multiple conductor cable shall be color coded with integral color for proper

identification. Color coding shall be equal to ICEA S-68-514, Table K-2. Cable shall meet the requirements of IEEE-383. A heat, moisture flame and chemical resistant, mechanically rugged ethylene-propylene insulating compound, 30 mils thick, shall be provided for #14 AWG. Conductors shall be tin or alloy coated stranded copper as per ASTM B-8 and B-33 or B-189. Overall cable jacket shall be chlorosulfonated polyethylene compound over cable tape and fillers and shall exceed the requirements of ICEA S-68-516.

E. Connectors, Terminals and Splices:

1. Provide connectors, terminals and splices for all power and lighting circuits using 600-volt wire and cable as follows:

a. Provide connectors, terminals, and splices, for all wire, cable, and equipment and bus connections that are designed and approved for the specific type and size of conductors being connected.
b. Connectors and terminals shall be designed and UL approved for use with the associated conductor material, and shall provide a uniform compression over the entire contact surface. Solderless terminal lugs shall be used on all stranded conductors.
c. Pressure-crimp type connectors, terminals and splices shall be applied with a mechanical or hydraulic tool with proper size crimpling dies for making each connection. The tool shall be of the type that will not release until the correct pressure has been applied.
d. Splices and taps in wire No. 10 AWG, and smaller, shall be made with approved, wire-nut-type, patent spring connectors. Use 3M Scotch-locks or equal.
e. Provide Burndy, type YAV box, or equal, pressure-crimp ring-tongue terminals for termination of No. 8 stranded cable.
f. Provide Burndy type YSV box butt splices, or equal, for splicing No. 8 AWG stranded cable.
g. For termination and splicing of cable of AWG No. 6 or larger, provide long-barrel, type YA pressure-crimp lugs and type YS tubular pressure-crimp splices by Burndy or equal. Use long-barrel pressure-crimp lugs wherever space conditions permit. Use long-barrel pressure crimp splices exclusively for splicing. Where space is inadequate for use of long-barrel lugs, provide Burndy Type YA-L, pressure-crimp, short barrel lugs, or equal. Use two-hole lugs on cable of 250 MCM and larger.
h. For tap off AWG No. 8 cable and larger, provide Burndy type KS split-bolt copper connectors (bugs), with Burndy type SC one-piece plastic split bolt covers, or equal. Other types of connectors for tapping may be used subject to prior approval by the Engineer.
i. Use proper size bronze bolts, nuts, washers, and lock washers of Burndy Durium alloy, or equal, for bolting cable terminations to equipment terminals and bus bars.
j. Termination of solid wires of AWG No. 10 and smaller at

terminal blocks shall be made by forming the wires in a ring to fit under a screw head, thus requiring no terminal lug.

2. Provide terminals and splices and make connections in control, alarm and instrumentation system as follows:

   a. For solid wiring provide type TP, vinyl-insulated, ring-tongue terminals by Burndy, or equal, for all terminations.
   b. In locations where splicing of solid wire is indicated or permitted by specifications, use type SP vinyl-insulated, butt splices by Burndy, or equal.
   c. Wire terminals shall be installed with pressure tools equal to those manufactured by American Pamcor, one of which is No. 59072, which obliges the Electrician to apply the correct pressure required to produce a tight connection before the tool is released. Use a pressure tool designed for the specific size of connector and wire being terminated.
   d. Taps in solid wire may be made with 3M, Scotchlock wire nut, or equal, except that the conductor being tapped shall not be cut, and shall be twisted together with the tap conductor before wire nut application.

2.07 LUGS

A. All power cables of any voltage class shall be terminated with tinned copper indentation-type lugs. The lugs shall be Bundy type YA, T & B, or equal, long barreled, with double indentations in the larger sizes. Two-hole lugs shall be used where possible. The Contractor shall be responsible for compatibility between hole size and spacing on the lugs and on the equipment furnished.

B. Terminate stranded conductors on mechanical connectors furnished on equipment. Where no connectors are included, provide suitable mechanical connectors.

C. Termination of stranded conductors on screw terminals will not be permitted. Provide suitable size compression or mechanical type connector with spade tongue.

2.08 PULLING COMPOUND

A. Pulling Compound, if used, shall conform to the recommendations of the wire and cable manufacturer.

2.09 CONDUIT, FITTINGS AND WIREWAY

A. Conduit shall be heavy wall, threaded, rigid, metallic conduit. PVC schedule 40 conduit shall be used where it is embedded in concrete and/underground runs, and aluminum conduit shall be used for exposed runs. Use PVC coated rigid steel conduit for risers and transitions from underground PVC conduit to above-ground conduit seals. Use galvanized rigid steel conduit above conduit seals. Conduit, fittings and wireway shall be sized in accordance with the National Electrical Code, where sizes are not shown on the Plans. Conduit smaller than 3/4-inch shall not be used.

1. Galvanized Steel Conduit shall be hot-dip galvanized, inside and outside, after threading, and shall conform to Federal Specification WW-C581, ANSI C80.1 and UL 6.
2. PVC Coated Steel Conduit shall be externally coated with a 40 mil of grey PVC per UL 6.
3. Aluminum Conduit shall contain less than 0.1 percent copper, and shall conform to Federal Specification WW-C-540C. It shall be as manufactured by Kaiser Aluminum and Chemical Corporation, Triangle, or approved equal. Alcoa thread lubricant shall be used on all aluminum threads.
4. Flexible Conduit shall be "Sealtite" flexible, liquid tight conduit, as manufactured by the American Brass Company, Bridgeport, Connecticut, the equivalent by 0-Z/Gedney, or equal.
5. PVC Conduit shall be Schedule 40, heavy-walled rigid, rated for 90 degree C cables conforming to UL 651, Fed Spec W-C-1094 and NEMA TC-2 as manufactured by Carlon or approved equal.
6. Conduit Fittings and Device Boxes embedded in concrete shall be PVC conforming to UL 514 and NEMA TC-3.
7. Wall Sleeves for Conduit shall be O.Z., positive, watertight through wall entrance fittings, FSK Series, Crouse-Hinds, or equal.
8. Entrance Seals shall be O.Z. type CSBG, Crouse-Hinds, or equal.
9. Rigid Conduit Straps and Clamp Backs of cast aluminum such as EFCOR 233 AL, Appleton, or equal, shall be used in attaching conduit to concrete surfaces where channels and clamps are not used.
10. Conduit Bushings shall be insulated metallic bushings by T & B, O.Z., or approved equal, except where grounding bushings are required.
11. Conduit Sealing Fittings shall be Crouse-Hinds, type GUAB, with sealing covers, or approved equal.
12. Wireways shall be of the size required plus no less than 50% of spare capacity, made of 12 gauge aluminum with hinged spring-latched covers conforming to UL 870, and painted to protect against corrosion. The Contractor shall furnish all necessary bends, couplings and connectors. Interior parts shall be smooth, free of sharp edges and burrs. Use grounding type locknut and copper bond wire to make wireway and attached conduits electrically continuous. Slip-fasteners are not acceptable for this purpose. Wireways shall be type HW as manufactured by General Metals, Inc., Square D, or approved equal.

2.10 SWITCHES AND COVERS

A. Light Switches shall conform with Fed Spec WS-896E and shall be rated 20 amp, 120/277 volt AC, for tungsten or inductive load, Hubbell 1221 and 1223, Leviton, or approved equal.

B. Weather proof Switch Covers shall be Crouse-Hinds DS185-SA, Appleton, or approved equal, copper-free aluminum.

C. Explosion-Proof Switches shall be rated 20 amp, 125 volts AC with front operating handle, Appleton Cat. No. EFS175-FL, Crouse-Hinds, or approved equal.

D. Safe-Run Switches shall be 2 position, double pole, single throw, maintained contact, selector switch in NEMA-4 enclosure, General Electric AJ201C or approved equal.

E. Safety Disconnect Switches shall be heavy duty Type A, quick-make, quick-break, horsepower rated, with external operating handle interlocked to prevent opening of the cover unless it is in the "off" and "open door" position. Switch shall be manufactured by Square D, Westinghouse, or approved equal.

F. Mercury Float Switch shall have molybdenum contacts sealed in a doublewalled float of plastic material resistant to inorganic salt solutions, alkalis, and mineral acids. The electrical cable shall be two conductors with neoprene jacket and shall run unspliced to the Control Cabinet. Switch shall be Enpo-Cornell Pump Co. or equal.

G. Limit Switch shall be heavy duty Square D Class 9007 or approved equal with 2 N.O. and 2 N.C. contacts.

2.11 RECEPTACLES AND COVERS

A. Outlets shall be 125 volt, 20 amp, grounding type, duplex receptacle specification grade, Hubbell 5362, Leviton, or approved equal.

B. Weatherproof Switch Covers shall be Crouse-Hinds DS185-SA, equivalent by Appleton, or approved equal, copper-free aluminum, gasketed cover.

C. Receptacle for Emergency Power shall be 4 wire, 4 pole with angle adapter and screw cover, Russell Stoll, Catalog numbers as indicated below for the different services, or approved equal:

1. JRSA 2034 DR45 for 240 volts
2. JRSA 2034 HR45 for 480 volts

D. Ground Fault Protected Receptacles shall be Class A, 120 Volt, duplex 20/20A NEMA 5-20R, Square D Catalog GDFR-120BC or approved equal.

2.12 PANELBOARD

A. Panelboards shall be dead front, safety type construction and shall conform to Federal Specification WP-115, NEMA PB1, ANSI C33.38 and UL67.

B. All circuit breakers shall be thermal magnetic, temperature compensated, bolt-on type with quick-make quick-break mechanism, of the frame and size indicated.

C. Circuit breakers minimum interrupting ratings shall be 22,000 A for 277 volts systems and 14,000 A for 120 volt systems. Circuit breaker minimum rating shall be 20A single pole unless otherwise noted.

D. The panel board shall be provided with the voltage, phases and amperage required per project drawings, with main and branch breakers ambient-

compensated. It shall provide for a minimum of 20% spare space. Panels shall have neutral and equipment grounding bus and shall be Square D, General Electric, Westinghouse or approved equal.

E. Install panelboards in accordance with manufacturer's instructions.

2.13 PUMP MOTOR CONNECTION BOX

A. Pump motor connection box shall only be used in submersible pump wet well applications. The Contractor shall furnish and install 24" x 18" x 8" NEMA 4X stainless steel enclosure with hinged bolt-on cover and all necessary appurtenances for a complete installation. Connection box assembly shall include 3' x 3' x 6" concrete slab and 1-5/8 x 1-5/8 unistrut support. The following shall also be included:

1. 6-Pole power insulated terminal block panel mount shall be Allen Bradley Bulletin 1492, sized as required.
2. 6-Circuit control insulated terminal block panel mount shall be Allen Bradley Bulletin 1492
3. Gland nut and neoprene bushing shall be Crouse-Hinds CGK, or approved equal, sized as required for cable outer diameter.
4. Conduit Seal.

2.14 TRANSFORMER

A. Transformer shall be 480 volt to 120/240 volt, single phase, 60 hertz, 3KVA for submersible stations. It shall be high efficiency Sqaure "D" Model 9070E01D1, or approved equal, with two 5% taps below normal, weatherproof for indoor or outdoor service.

2.15 PULL BOX

A. Pull box shall be welded aluminum, 12 gauge, with hinged cover, minimum dimensions of 12 inch x 12 inch x 6 inch, without knockouts, anodized and painted, as manufactured by General Metals, Inc., Hoffman, or approved equal.

2.16 LIGHTNING ARRESTOR

A. Lightning arrestor shall be 3-pole, 650 volt, thyrite secondary arrester, General Electric type 9L15BCC008, Westinghouse 634A217AO1, or approved equal.

2.17 SURGE CAPACITOR

A. Surge capacitor shall be a 3-pole, 650 volt, 1.0 mfd. capacitor. It shall be a General Electric Type 9L18ABB301, equivalent by Westinghouse, or equal.

2.18 EMERGENCY LIGHT

A. Furnish and install wall mounted emergency light package unit with battery backup wired to an existing lighting fixture, Hubbel Lighting IMF 12-50-2-

P8 or approved equal.

2.19 LEVEL CONTROLLER

A. Level controller shall be microprocessor based SCADA ready, station controller with float switches backup. It shall measure the depth of water in the wet well and operate the pumps based on selected setup values. The controller shall be a microprocessor-based device and not require a battery to maintain the operating program. All set-up values shall be stored in non-volatile memory.

B. The controller shall be standard “off the shelf” equipment with published literature and fully tested hardware and operating program. The controller shall be field configurable from the front of the unit, and require no special tools or software to set-up or operate.

C. MPE Station Controller, microprocessor based controller with pressure transducer, Model SC2000, as manufactured by Motor Protection Electronics, Inc. or approved equal.

D. Provide intrinsically safe duplexer backup controller with float switches, as manufactured by Motor Protection Electronics Inc. or approved equal.

2.20 PUMP STATION LEVEL TRANSDUCER

A. A submersible level transmitter shall be capable of sensing and measuring the level of wastewater in the wet well based on the hydrostatic pressure above the submerged sensor’s diaphragm.

B. The level transmitter shall be factory calibrated to a nominal 4-20 mADC output.

C. The transducer housing shall be fabricated of PVC with a 2.5-inch diameter Teflon diaphragm and shall be filled with silicone oil.

D. The sensor shall be mounted using its signal cable and have ¾” NPT pipe threading for pipe mounting.

E. The internal air pressure of the sensor assembly shall be relieved to atmospheric pressure through a sealed breather system.

F. The unit shall measure 9 inches high by 3.8 inches diameter. The cable diameter shall be 0.26 inches.

G. The level transducer shall be Model SLX 130-M, as manufactured by Contegra, Inc., or approved equal.

H. The mounting option used shall be a 316 SS pipe for cable suspension (SLX-SP1 Contegra Option 3).

PART 3 EXECUTION

3.01 GENERAL

A. All electrical work shall comply with the applicable rules of the National Electrical Code, the National Fire Protection Association, and the South Florida Building Code, and shall be in accordance with the requirements of OSHA, and the best commercial and industrial practice. Conduit and cable shall be sized as specified in the National Electrical Code, where sizes are not shown on the Plans.

B. All electrical wiring, regardless of voltage classes, shall be installed in rigid conduit, except where shown otherwise on the Plans. No conduit installed shall be smaller than 3/4 inch IPS and no wire smaller than 12 gauge, except as otherwise shown on the Plans, specified herein, or authorized by the Engineer.

C. In some cases, the exact requirements must be determined from the shop drawings of the equipment furnished by the Contractor. Changes required by the Contractor - furnished equipment shall be the Contractor's responsibility. Materials or equipment damaged in the course of installation or test shall be replaced or repaired to the satisfaction of the Engineer.

3.02 EXAMINATION

A. Verify items provided by other sections of Work are properly sized and located.

B. Verify that built-in items are in proper location, and ready for roughing into Work.

C. Electrical service shall be built per Florida Power & Light Standards.

3.03 INSTALLATION OF 600-VOLT WIRE AND CABLE

A. Install wire and cable in conduits, ducts, wireways, cable trays and other enclosures as indicated.

B. Except as otherwise indicated or specified, all wire and cable shall be installed in continuous runs between terminal points without splicing.

C. Make splices and taps only in junction boxes, from terminals in terminal boxes, in manholes, in handholes and other accessible enclosures.

D. Do not splice wire and cable in ducts or conduits.

E. Except as otherwise indicated, or specified, do not splice or tap control, alarm or instrumentation wiring in underground manholes and handholes.

F. When pulling wire or cable, do not subject the wire or cable to a tension greater than 50% of the yield strength of the conductor. Pulling lugs shall be attached to the conductor with a sleeve or grip over the cable sheath to prevent slipping the insulation.

G. Use a UL approved lubricant to decrease friction when pulling cable in

ducts and conduits

H. Do not subject cable to a bending radius less than 8 times the cable O.D. during or after installation.

I. In wet locations, make splices first as for dry locations, then encapsulate them in an epoxy resin sealing and potting compound. Encapsulation of compression sleeve splices shall be with preformed molds.

J. Pulling of wires and cable into conduits shall be done in a manner which will in no way injure the insulation.

K. All wires in conduit shall be continuous between pull points without splices. No joints or splices in the conductors shall be permitted except at outlet or accessible junction boxes.

L. Sufficient lengths of wire shall be left at pull boxes for connecting to equipment and apparatus without straining.

M. All wires passing through pull boxes shall have enough slack in each box so they may be pulled out of the box a distance of no less than 6" across the entire length of the box.

N. Pull together all cables or conductors to be installed in a single conduit.

O. Wire Sizes: Drawings indicate wire and conduit sizes for typical equipment. If sizes shown on the drawings are not appropriate for the equipment chosen by the Contractor, wires and conduit shall be sized for the proper current-carrying capacity (including voltage drop and motor inrush allowances) in accordance with the NEC, at no extra cost to the Department. On 120/240 volts systems, "Homeruns" of over 50 feet in total length from panel to first outlet shall be #10 AWG minimum size and on 277/480 volts, the distance shall be 100 feet total length for #12 AWG minimum size.

3.04 CONDUIT INSTALLATION

A. The Plans are generally indicative of the work to be installed, but do not show all bends, fittings, boxes, and specialties which may be required or the exact location of all conduits. The Contractor shall carefully investigate the site and conditions affecting all of his work and arrange his work accordingly. Any changes from locations shown on the Plans must be approved by the Engineer.

B. Conduits shall be installed in such a manner that wires may be removed and replaced at a later date and to ensure against collection of condensation or rainwater. Where bends are made, they shall be made with an approved conduit bending machine. Crushed or deformed conduit shall not be used.

C. All conduit ends shall be square cut and reamed to remove burrs. Running threads will NOT be permitted. Approved couplings shall be used. All conduit joints shall be made up wrench tight, using strap wrenches, and shall be made waterproof in such a manner as not to interrupt the electrical bonds.

D. As soon as installed, all open conduit ends, including those terminating in boxes, shall be plugged or capped and so maintained during construction to prevent the entrance of moisture and dirt. All conduit shall be carefully cleaned and dried inside before the installation of wire.

3.05 GROUNDING

A. All grounding shall comply with the requirements of the National Electric Code and all local Codes having jurisdiction.

B. Unless otherwise shown on the Plans, the ground system shall be composed of at least two 5/8" in diameter by 10 feet long copper clad ground rod, spaced a minimum of 6 feet apart. Ground rods shall also be connected to rebar in slab. Make all connections with #6 bare copper wire.

C. Maximum ground resistance shall not exceed 25 ohms under normal dry conditions. Additional ground rods shall be driven if required to maintain this level.

D. All electrical equipment, structural steel, guard rails, and other metallic objects shall be connected to the above-mentioned ground system.

E. Provide a warning ribbon installed at 12" depth in the ground above the ground loop conductor.

3.06 NEUTRALS

A. Each circuit which requires a neutral conductor shall have its own individual neutral conductor, contained in the same enclosure.

3.07 TESTING

A. All circuits and motors shall be megger tested, and the voltage and current load on each circuit shall be checked. Five copies of the results shall be furnished to the Engineer and the Department before acceptance of the work.

END OF SECTION

SECTION 16780

S.C.A.D.A. SYSTEM R.T.U. INSTALLATION

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. All conditions of the existing contract shall apply.

B. The Contractor shall coordinate all work with the local Electrical Supervisor for the area. The Contractor shall review the installation with the area Electrical Supervisor before starting the work. The installation shall be completed and inspected by the local supervisor or his representative.

C. The Contractor shall be responsible for location of all utilities.

1.02 REFERENCE STANDARDS

A. All work shall be in accordance with the Florida Building Code and the National Electrical Code.

PART 2 - PRODUCTS

2.01 MIAMI-DADE WATER AND SEWER DEPARTMENT SUPPLIED MATERIALS

A. R.T.U. in a NEMA 4X enclosure. Note that batteries are to be furnished and installed inside the 4X enclosure by the contractor.

B. Radio

C. Antenna with mounting cap and cable

D. Force main pressure transmitter assembly consisting of a 1-inch diameter threaded nipple, manifold with test port and pressure gage with isolation diaphragm and the pressure transmitter unit.

E. Low level pressure switch

F. Wet well level transformer (for the RTU)

G. Current transformer

H. Amp transmitter

I. “Station Flooding”(drywell) and “High Level”(wetwell) float switches; Mini Float,

model SM N.O.

J. “Low Level”(wetwell) float switch; Mini Float, model SM N.C.

K. “Intrusion Alarm” , Square D 9007 Series A, Type C54D, Type C54RC, Type C54A2, Microswitch #MC7711-BZ-2R-A2 or equal as required for that type of installation.

2.02 CONTRACTOR SUPPLIED MATERIALS

A. Unless otherwise specifically called out elsewhere herein, all other labor, materials and equipment required for SCADA System R. T. U. Installation will be provided by the Contractor whether or not said items are specifically called out in the Contract Documents.

B. Individual wires shall be 600 volt, 75° C insulation, 14 guage stranded copper. Ends shall be terminated with compressiron lugs. Wires shall be color coded according to Miami-Dade Water and Sewer Department supplied drawings and identified by wire marking labels. Any circuits designated as “spare” shall each have individual ends securely taped and marked “spare”.

C. Shielded multi-conductor transducer wire shall be Belden twisted #16 stranded copper with shield, 600 volt rated. The shield shall be terminated at the R. T. U. end only. Shield shall be cut back to insulation and taped at other end. Shielded wire shall be run in a raceway with no other power circuits.

D. The antenna ground rod shall be copper weld 3/4", 10 feet long and driven by the Contractor.

E. Tapping saddle assembly for pressure transmitter consisting of: solid brass, single strap (silicon bronze), tapping saddle with Buna-N-gasket, Ford Style 101B with 1-inch tap; brass corporation stop with 1-inch inlet, outlet and valve AWWA/CC taper thread inlet by flare copper outlet, Ford FB600-4; brass adapter for flare copper connection (replaces flare nut) 1-inch female copper thread x 1-inch female iron pipe thread, Ford part no. C01-44. All items specified as brass shall be ASTM B-62, UNS C83600 allow and shall conform with NSF 61.

PART 3 - EXECUTION

3.01 ANALOG INPUTS

A. Three transducers are involved at each site with standard or microprocessor control (current, wetwell pressure level, and force main pressure). The pressure transmitters will be installed by MD-WASD forces in coordination with, and as a part of, the Contractor’s permitted work. The Contractor shall mount the current transformer on the leg of the power cable from which the control power is derived and connect shielded wiring to all three transducers. The current

transformer shall be installed to indicate power used whether on normal or generator power where applicable. The current transducer shall be installed in existing cabinets as close as possible to the current transformer.

B. At sites identified by the City only two types of transducers, (force main pressure and current), will be used. Shielded wire from the level logic control device to the R. T. U. shall be installed for level indication. Termination of the shielded cable to the control unit shall be performed by the City forces.

C. Other analog inputs may include flow recorders, suction pressure, discharge pressure, vibration or R. P. M. input. The MD-WASD shall supply devices and the Contractor will supply and install circuits. These circuits will be installed by the Contractor, but terminated by MD-WASD forces.

3.02 ANALOG OUTPUTS

A. At sites determined by MD-WASD shielded wire and conduit shall be installed for analog outputs such as VFD speed control, valve control, or other positioning devices. Circuits shall be installed by the Contractor, but terminated by MD-WASD.

3.03 DISCRETE INPUTS

A. Feedback signal circuits are “Pump On”, “Station Flooding” (drywell), “High Level” (wetwell), “Low Level” (wetwell), “Generator Run”, “Intrusion Alarm” and “Common Alarm”. Except where noted, the Contractor shall provide all materials and devices to complete these two wire circuits. The power will be from the R. T. U. and all devices shall be normally open in the safe or off condition.

1. “Pump On” shall be provided by a Contractor furnished and installed auxiliary contact on each pump motor starter. (Note: two speed pumps require two per pump.) No other devices shall be used to indicate “Pump On”.
2. “Station Flooding” (drywell), “High Level” (wetwell), and “Low Level”(wetwell), shall be supplied by MD-WASD and installed by the Contractor. In pump stations with pneumatic controls (bubbler system) MD-WASD will provide a pneumatic pressure switch for “Low Level”(wetwell) to be installed by the Contractor.

3. “Intrusion Alarm” will be supplied by MD-WASD and installed by the Contractor.

3.04 DISCRETE OUTPUTS

A. Active control circuits to start each pump, (or each speed), stop pump, and reset alarms shall be installed and connected.

1. The normally closed stop relay in the R. T. U. shall be connected in series to the existing stop control circuit.
2. The normally open start relay shall be connected in parallel to the existing auto start control circuit. **No existing safety or process orderly shutdown circuits shall be bypassed or defeated for either the start or stop control circuit.**
3. The “Common Alarm” circuit shall be from a normally open R.T.U. relay in parallel with the existing reset switch.

3.05 R. T. U.

B. There shall be no holes or entrance of any type into the top of the R.T.U. enclosure.

C. The R. T. U. shall not be mounted below grade or inside the drywell. If existing structure does not provide mounting for the R.T.U. a separate MD-WASD approved stanchion shall be constructed and installed by the Contractor. The R.T.U. stanchions shall be installed in accordance with current MD-WASD approved S. C. A. D. A., R. T. U. installation drawings. Equivalent parts shall require approval by the S.C.A.D.A. Section representative.

D. All abraded galvanized hardware shall be cleaned and then recoated with two coats of cold galvanized compound.

3.06 CONDUITS

A. Rigid galvanized conduit shall be used in all exterior below grade installations. It shall be coated with two coats of Bitumastic No. 50 or equal. Rigid galvanized conduit shall extend completely through all concrete penetrations at which point it may be converted to PVC conduit in the interior of the drywell. Rigid aluminum conduit may be used in installations above grade where exposed.

B. All concrete penetrations shall be sealed with epoxy grout compound. All conduits shall have minimum 1/4" spacing where installed on concrete surfaces.

C. All conduits below grade and/or extending from the wetwell shall have seal off fittings installed before entry into the R. T. U. enclosure. All conduits shall be sealed with duct seal compound during the construction phase to limit the exposure of electronic circuitry to corrosive atmosphere.

3.07 MISCELLANEOUS

A. A separate circuit shall be provided for and installed by the Contractor from the existing lighting/control panel, to provide 120 VAC power to the R. T. U. This circuit shall be routed through an available phase monitor relay normally open contact. This circuit will be switched on by the SCADA Section at start-up.

B. For wetwell/drywell pump stations with the pump controller in the drywell a MD-WASD supplied enclosure and terminal strips shall be installed for circuits entering and exiting the drywell.

C. Additional work such as sidewalk or street cutting may be required. This work must be authorized by the Project Manager and validated by a detailed, itemized invoice showing exact labor and material used.

D. An as-built drawing, (schematic and point-to-point) of the final installation and approved by the SCADA representative shall be provided by the Contractor for the installation before final payment is made.

E. A Certificate of Completion and original approved permits shall be supplied to the Department before final payment is made.

F. Install SCADA tapping saddle at location shown on Plans, pressure test, perform 1-inch tap, in coordination with MD-WASD forces, connect remainder of pressure transmitting system, and test.

END OF SECTION

SECTION 16940

PUMP STATION CONTROL PANEL

PART 1. GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish and install a pump station control panel, which shall include the level controller, relays, switches, lamps, and all electrical material specified herein or required for a complete installation.

B. The contractor is responsible for the erection, installation and start-up of the equipment covered under these specifications.

1.02 RELATED SECTION

A. Section 16051 - Pump Station Electrical Materials.

1.03 QUALITY ASSURANCE

A. All electrical materials and equipment shall be new, of recent domestic manufacture, and approved by the Underwriters' Laboratories, Inc. Material or equipment damaged in the course of installation or test shall be replaced or repaired in a manner meeting with the approval of the Department. Further, said repairs or replacement shall be performed by personnel qualified such that the UL approval will not be lost. The Contractor shall provide satisfactory evidence of these qualifications to the MD-WASD prior to the work being performed.

B. All electrical material and installation shall comply with the following codes and standards listed in Section 16051, Subsection 1.03.

C. Furnish equipment designed, built and tested by a firm with at least ten years of experience manufacturing this type of equipment.

D. Comply with NFPA 70, “National Electrical Code,” for components and installation.

E. Furnish equipment that bear the UL label.

1.04 SUBMITTALS

A. The Contractor shall provide all submittals in accordance with Section 16051, Subsection 1.04

B. Submit for review, properly identified manufacturers’ literature and shop drawings including but not limited to the following:

1. Dimensioned outlined drawings (Plan and Elevations).
2. Itemized bill of materials.
3. Manufacturers’ literature and shop drawings for every piece of equipment mounted on the panel.

4. Enclosure construction details.
5. Operating and maintenance manuals.
6. Detailed external wiring diagram and sequence of operation.

PART 2. PRODUCTS

2.01 GENERAL

A. The Control Panel shall be designed and built as integrated, pre-wired equipment. It shall control the operation of number of pumps in the station, based on the level in the wet well.

1. Level controller (specified in Section 16051, Subsection 2.19) shall monitor the wet well level and actuate the sewage pumps in sequence with rising water level. Once a pumping cycle has started, it shall continue until the stop level is reached. All start/stop levels shall be adjustable, based on design levels shown on the Plans. Controller shall maintain level to within ± 1% of full scale (i.e. maximum depth).
2. The level controller shall have a 3-position selector switch for manual selection of pumps sequence. An alarm shall be annunciated whenever the lag pump is called on, indicating failure of lead pump.
3. The Panel shall include the level indicator and pumps alternators, motor controllers, relays, switches, lamps, pressure switches and any other device shown on the Plans, or required to function as specified. Shop drawings of every device shall be submitted and approved before the panel is assembled.
4. Phase monitor relay shall be Timemark Model 258, Potter-Brunfield CPS-38, or approved equal, fused on line side and disconnect only for 3-phase equipment.
5. Selector switch to manually select or automatically alternate position of "lead" and "lag", sewage pumps after each pumping cycle shall be furnished and installed.
6. The manufacturer of the control system shall be certified by the Underwriters Laboratories (UL) as a UL 698A listed system panel manufacturer certified to install serialized label for quality control and insurance liability considerations.

B. Each major component shall be identified by an engraved phenolic nameplate.

C. All wiring shall be a flexible, stranded type and each conductor shall be tagged and numbered according to wiring diagrams and neatly tied.

D. The Control Panel shall be dimensioned to facilitate maintenance.

2.02 ALARMS

A. Control panels shall be capable of reporting, a minimum, of the following alarm points:

1. Dry Well High Level (Float switch).
2. Wet Well High Level.
3. Wet Well Low Level (With auxiliary contact to stop sewage pumps.)

4. Level Controller Failure.
5. Sewage Pump High Temperature or Failure (with pump shut down, lock out relay and reset push button.)
6. Loss of Phase Voltage.
7. Sump Flood (Dry well only).

B. Provide three spare alarm points and one set of N.O./N.C. contacts from common alarm relay for remote signaling. Every alarm shall be indicated by a labeled red pilot light mounted in the control panel. A red light with guard protector, as Series VDA manufactured by Crouse-Hinds, or approved equal and a bell with silencing buttons shall be mounted in the service enclosure. The alarm lights shall remain "on" until alarm signal is reset at control panel.

2.03 MOTOR STARTERS

A. Motor starters shall be sized as indicated on the drawings, with overloads to match the supplied motors. One set of N.O/N.C. spare contacts shall be provided in the sewage pump starter. Motor starters to be Siemens, Square D, Cutler Hammer, or approved equal.

B. Starters for sewage pumps shall be three-phase, sized in accordance with the following table:

NEMA SIZE STARTER			
Motor Size (Horsepower)	Single Phase 240 Volt	Three Phase 208 Volt	Three Phase 480 Volt
Up to 5	2	1	1
7½	2	2	1
10	-	2	2
15	-	3	2
20	-	-	2
25	-	-	3
30	-	-	3
40	-	-	3
50 to 75	-	-	4
100 to 150	-	-	5

2.04 CONTROL PANEL ACCESSORIES

A. All wiring shall be a flexible, stranded type and each conductor shall be tagged and numbered according to wiring diagrams and neatly tied.

B. All external wiring shall terminate in a terminal block, Square D Type G class 9080, or equal.

C. Relays shall be socket-mounted for ease of replacement, Square D Type K Class 8501, or equal.

D. Lamps, push bottoms, and switches shall be heavy duty oil-tight/watertight, Square D, Type K Class 9001, or equal.

E. Elapsed time meters shall be provided to indicate total running time of each sewage pump in "hours" and "tenths of hours". Meters shall be Eagle Signal Series HK or approved equal. An extra elapse time meter shall be furnished and installed to indicate the total time for all pumps simultaneous run.

2.05 LEVEL CONTROLLER

A. As specified in Specification Section 16051.

2.06 TELEMETRY

A. Telemetry (RTU) provided by the City shall be installed by the Contractor in its own weather-proof and corrosion-resistant enclosure separate from the control panel enclosure. The manufacturer of the control system shall provide the hardware required to interface the controller with the City SCADA System to remotely start-stop the pumps and monitor the operation of pumps and alarms.

2.07 CONSTRUCTION

A. Outside panels shall be gasketed, NEMA 3R, free standing, stainless steel, 12 gauge minimum construction, with same material continuous hinges and dead front anodized aluminum inner door. Finishing of the enclosure to be No. 2B. Padlocking of motor circuit breakers shall not obstruct the closing of the inner doors.

B. Inside panels shall be NEMA 12, constructed of .080 inches thick anodized aluminum or 14 gauge 316 stainless steel. Control wiring shall be color coded (minimum of 16 different colors), 16 gauge, 600 volts, 90 degree C. standard tinned copper, PVC insulated with crimped terminal connections.

C. Enclosure shall be approximately 48" W x 48" H x 12" D. The top of the panel shall stand no higher than 72-inches from the top of the support concrete pad. In any case, it shall be sized to facilitate maintenance of enclosed equipment with a double door. Total length of the enclosure will depend on the size of the pumps but shall be sized to provide enough space so that every piece of equipment can be easily reached for service and maintenance. The outer doors shall be furnished with a locking latch and staple for padlock, to be furnished by the City. All hardware shall be stainless steel. Provide every outer door with a limit switch to trip a remote alarm in case of unauthorized opening. Panel seams shall be continuously welded and ground smooth. All exterior joints shall be ground level and polished smooth. Stiffeners shall be added to panel sides and doors as necessary to ensure rigidity. Lifting eyes and a rolled lip around

three sides of the outside doors shall be provided. Provide also a rain shield over the generator outlet or access opening. Enclosure shall be 12-inches deep minimum.

D. The double doors shall be made of the same material as the enclosure. All edges of the doors shall be folded inward, similar to the cabinet to form a rigid non-flexing door. The door shall be hung on a continuous stainless steel hinge with stainless steel bolts and nuts. The door shall be equipped with a three-point locking latch, a handle and a heavy-duty stainless steel staple for a padlock. Provide a friction type latch on hinge side to keep the door in position desired and to keep it from being closed by the wind.

E. Cabinet anchorage shall consist of chemical adhesive anchor cartridge system 5/8" φ, minimum, stainless steel anchor threaded rod with 5-1/2", minimum, depth of embedment. The cabinet shall be secured to the concrete base at a minimum of four locations.

F. An external red LED strobe light, vapor tight with aluminum lens protector shall be mounted on a side of the enclosure. The voltage of the strobe light shall be 120 Volts AC and will flash on an alarm condition. The strobe light will continue to flash after the alarm silence button is pressed until the alarm condition has cleared.

G. The alarm bell shall be 120 volt A.C., 6 inches diameter, 90 db, weatherproof with protecting guard. Bell shall be Simplex Series 4090 or approved equal.

H. A cast or stamped plate, with the legend "Miami-Dade Water and Sewer Department, Tel. (305) 274-9272" in characters a minimum of 2-inches high, shall be firmly attached to the upper portion of the door by welding or tamper-proof bolting.

I. Provide stainless steel weather and sun shield welded to top of panel enclosure as shown on drawings if Variable Frequency Drives (VFD) or Soft-Start equipment are included and located within the enclosure. Shield shall be factory installed.

J. All hardware including hinges, 3- point latches and handles shall be corrosion-resistant metal.

K. Make all punching, reaming, cutting and other fabricating work before any finish is applied. Prior to painting, clean, degrease and phosphate-clean all panels. Final finishing, not less than three coats of semi-gloss polyurethane paint applied over a rust inhibitor primer. Panel interior to be white, with exterior surfaces of light gray ANSI-61.

L. Provide print pocket inside the panels to hold detailed wiring and interconnecting diagrams. One copy of the relevant drawings shall be provided and placed in these pockets.

M. Wiring to be stranded copper with 600 volt rated thermoplastic insulation. Power wiring shall be No. 14 AWG and control wiring No. 16 AWG minimum. Electronic signal wiring shall be No. 18 AWG twisted and shielded pairs.

Wiring shall not be spliced. Wiring shall be tagged for identification with printed wire sleeves or self-stick labels.

1. Color Coding to be as follows:
   a. Black: AC hot (line feed and load circuits).
   b. White: AC neutral.
   c. Green: Bonding ground.
   d. Red: AC control circuits.
   e. Yellow: Wiring with foreign voltage.

N. All wiring to and from field mounted devices shall be terminated at terminal strips, not directly connected to devices. Use plastic wireway Panduit or equal to route wire within the panel. Wireway shall be run in continuous length with snap-on covers, with AC and DC power wiring in separate wireways.

O. Protect all devices against damage from electrical transients induced in interconnecting lines by lightning discharges and nearby electrical equipment. Surge suppressors shall be provided at least at any interconnection of AC power and electronic equipment and at every analog signal input with circuits extending outside the building.

2.08 PANEL MOUNTED AIR CONDITIONING UNIT (VFD APPICATIONS ONLY)

A. The enclosure shall be Stainless Steel NEMA 4X rating fully gasketed for tight, leakproof installation. It shall be UL/CUL listed with closed loop cooling to allow the interior airflow system to be isolated from the ambient airflow system. The system shall be designed so no ambient air can invade the cool, dehumidified sensitive compartment.

B. Condenser Coils shall be Epoxy-Coated. This coating shall withstand 1000 hours of salt spray per the ASTM B 117 test method.

C. An air cured coating shall be sprayed on interior copper lines and brazed joints on the condenser side to provide protection from corrosive environments. The coating shall withstand 1000 hours of salt spray per the ASTM B 117 test method.

D. The unit shall include thermostatic Low Temperature Control to prevent over-cooling and to provide energy-efficient operation. Refrigerant shall be R410A.

E. Filters shall consist of a multi-layer grid of sturdy corrugated aluminum, securely held in a one-piece aluminum frame. Filters are required wherever air is drawn into an electronics enclosure or related cooling equipment to keep internal parts as clean as possible.

F. A short cycle relay shall be installed to protect the compressor from possible damage due to harmful short cycling, (frequent starting) where temperature controls enable the compressor to restart frequently or after a power interruption.

G. The unit shall be as manufactured by Kooltronic or approved equal. The unit shall be sized appropriately.

PART 3. EXECUTION

3.01 EXAMINATION & INSTALLATION

A. Verify items provided by other sections of Work are properly sized and located.

B. Verify that built-in items are in proper location, and ready for roughing into Work.

C. The Contractor shall provide limit switch to turn light "ON" when dry well hatch is opened.

D. Minimum interrupting capacity of the electrical panel shall be 10,000 AMPS.

E. Sump pump shall be provided with high level alarm wired to the telemetry.

F. A sump pump, discharge piping and local switch shall be installed in the valve pit in.

END OF SECTION

SECTION UC-250

GRAVITY SEWER SYSTEMS

PART 1 - GENERAL

1.01 SCOPE

A. These Specifications shall govern the design, materials and installation requirements of the Department for gravity sanitary sewer systems constructed in its service area when using Poly (Vinyl Chloride)(PVC) pipe and fittings, Vitrified Clay (V.C.) pipe and fittings or Ductile Iron pipe and fittings. "PVC" shall mean Poly (Vinyl Chloride) as it relates to pipe and fittings.

B. This Specification does not purport to cover all material or installation procedures which may be required, whether by the nature of the proposed work, or by the Department, or by other regulatory agencies.

C. It is intent of the Department to obtain a complete and working installation under this project, and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

1.02 QUALITY ASSURANCE

A. All material and installation shall be in accordance with the Department's Design and Construction Standard Specifications and Details.

B. The material and installation for this project shall be in full compliance with all applicable standards listed in Section 01090, '' Reference Standards"

1.03 DEFINITIONS

See Section 01005, "Defined Terms"

1.04 PROJECT APPROVAL

The approval of the Department shall be secured, in accordance with Section 17005, prior to any construction related activity.

1.05 SPECIAL CONDITIONS

The work shall proceed in accordance with the following specification sections, bound herein:

A. Section 01011 - Site Conditions
B. Section 01016 - Safety Requirements and Protection of Property
C. Section 01031 - Grades, Lines and Levels
D. Section 01100 - Special Project Procedures
E. Section 01750 - Maintenance of Traffic and Public Streets

1.06 DESIGN REQUIREMENTS

A. GENERAL

1. Gravity sanitary sewer systems shall be designed in accordance with the State of Florida Department of Environmental Protection (DEP) Rules, Chapter 62-604 for Wastewater Facilities, with OSHA requirements and with the "Florida State Board Health Sewage Guide" and the recommendations of Chapter 12 of the ASCE Manual No. 37, "Sewer Design and Construction", except as otherwise provided herein. Wet wells and manholes shall be classified as hazardous areas, Class 1, Division 2, Group C.

2. In addition, systems shall be designed in accordance with the requirements of the Miami-Dade County Department of Environmental Resource Management (DERM), the requirements of the latest edition of the South Florida Building Code and the Miami-Dade Water and Sewer Department Standards and Specifications.

3. The use of PVC pipe or AWWA C900 PVC pipe within a public water supply wellfield cone of influence or in areas zoned industrial or commercial shall be as stated under "Tightness Standards" in Section UC-370.

4. Manhole to manhole runs shall be kept in the range of no more than 400 feet without permission.

5. Slope shall be such as to maintain two feet per second minimum velocity when running full or half full when calculated using the Manning Equation with a roughness coefficient of .013.

6. Minimum slope for terminal runs shall be 0.40 percent for eight inch pipe. This slope shall be maintained for a minimum of 300 feet and longer if loading is abnormally light.

7. Design shall be performed by experienced personnel who have previously designed sewerage collection systems in Miami-Dade County. Proof of experience shall be provided if required by the Department. All design work submitted for approval shall be signed, sealed and dated by a registered professional engineer licenced to practice in the State of Florida.

8. The Department reserves the right request complete design calculations, which shall be submitted and shall be in a format easily read.

9. Design shall be conservative with sufficient peaking and infiltration factors included. Absolute minimum slopes shall not be used since minor field construction variations will reduce slopes and give actual velocity of less than two feet per second.

10. The Department reserves the absolute right to require greater slopes, higher peaking or infiltration factors if this is considered necessary upon review of design. The design/build firm shall conform with any such requirements and supply said design and construct same at no extra cost to the County.

11. The use of PVC pipe and fittings will only be permitted for gravity sanitary sewers (and service laterals) 15-inches in diameter and smaller.

1.07 PERMITS, INSPECTIONS AND FEES

A. The Contractor shall obtain and pay for all permits, official inspections and all other fees in accordance with Section 01740, "Permits".

B. Inspection by Department personnel is required in addition to, not in lieu of, municipal and County department inspections (if any).

C. No installation will be accepted until it has passed all inspections, including pavement installation or replacement.

1.08 PRECONSTRUCTION CONFERENCE

Prior to commencement of the work, the Contractor shall attend a "Preconstruction Conference" in accordance with Section 01150, "Preconstruction Conference".

1.09 SUBMITTALS

A. The Contractor shall furnish "As-Builts" in accordance with Section 01725. Project Record Documents shall be submitted in accordance with Section 01720. The Contractor shall submit operating and maintenance instructions and all other submittals in accordance with Section 01730.

B. Where the Specifications require test certification or certification that certain products or material furnished are as specified, the Contractor shall deliver such certification to the Department. No material or equipment shall be approved for use in the work until individual certification has been received.

1.10 SAFETY REQUIREMENTS

A. The Contractor shall be in compliance with all applicable provisions of the Occupational Safety and Health Act of 1970, in general, and any subsequent amendments and revisions thereto and specifically to the provisions concerning confined space entry.

B. The Contractor's personnel will be in the vicinity of raw sewage. For his own protection, as well as for his employees, he shall check with Metropolitan Dade County Health Department, and based upon their recommendation, shall have his personnel properly immunized against disease.

C. Under this project, personnel may be required to enter the existing manholes/sewers to perform certain items of work. Before entering, the Contractor shall be in compliance with Dade County Manhole Ordinance No. 83-3 (which mandates, in part, that above-ground safety personnel shall be on duty at all times when someone enters or works in a manhole/sewer and the air within a manhole / sewer shall be tested with a combination oxygen deficiency meter-explosion meter to determine oxygen content and explosion potential). A test for the presence of hydrogen sulfide shall also be performed. The work area must be ventilated mechanically by the use of an air blower, before entry and during occupancy, to insure that an adequate quantity of oxygen is supplied to the work area.

D. The Contractor shall conduct his operations in such a manner, utilizing warning devices such as traffic cones, barricades and warning lights, and personnel such as flagmen and uniformed police officers, that the public is given adequate warning of hazards of the work site as may be deemed necessary by the authority having jurisdiction and/or the Department. See Section 01750, "Maintenance of Traffic and Public Streets."

E. In the instance of men working within the manholes, the Contractor shall provide safety provisions to cover any possible consequences of structural failure and/or flooding. Such provisions might take the form of, but not be limited to, ladders in position to permit rapid egress; safety harnesses ; stand-by pumping equipment; extra air supplies; and such other measures as the situation and good construction practices might indicate.

F. Certain products specified in these Specifications contain warnings by the manufacturers that under certain conditions, if instructions for use of the product are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.

PART 2 - PRODUCTS

2.01 GENERAL

A. All material for use in the Project shall be new and of recent domestic manufacture and shall be the products of reliable manufacturers or suppliers who, unless otherwise specified, have been regularly engaged in the manufacture of such materials and equipment for at least five (5) years.

B. All fittings and components shall, wherever possible, be standard stock articles of well known manufacturers.

C. Where the Specifications designate the products of a particular manufacturer, the product specified has been found suitable for the intended use, but, unless otherwise provided, articles or products of similar characteristics may be offered for the approval of the Department, upon approval by the Engineer of Record.

D. Copies of complete descriptive data shall be furnished regarding all material, consisting of dimension drawings, catalog references and other information necessary to clearly identify each article.

E. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent or connected structures and equipment, at his expense

F. Unless otherwise specified, all steel bolts, nuts, washers and all other miscellaneous ferrous metal items (except cast iron) furnished by the Contractor shall be hot-dip galvanized in accordance with ASTM A386, "Zinc Coating (Hot-Dip) on Assembled Steel Products" and ASTM A385, Providing High-Quality Zinc Coatings (Hot-Dip)". Where the word "galvanized" or its abbreviation is used on the Plans or in the Specifications, it shall mean hot-dip galvanized. Fabricated items shall be hot-dip galvanized after fabrication. Internal threads shall be tapped or re-tapped after galvanizing.

G. Where miscellaneous materials are required for a complete installation the Contractor shall provide such materials in conformance with Section 15065, "Miscellaneous Material".

H. See Section 01100 for water used in construction.

2.02 CASTINGS

A. GENERAL

1. Material used in the manufacture of the castings shall conform to ASTM A48, "Gray Iron Castings", for Class 30 iron. Manhole and valve box covers shall have a roadway or pedestrian type surface as required by location, and shall be non-rocking.

2. Castings shall be in compliance with Section 05550. Castings shall be as manufactured by U.S.F. Fabrication, Inc., Neenah Foundry, or approved equal.

3. Castings shall be delivered unpainted with a shotblasted finish.

B. MANHOLE FRAMES AND COVERS

Manhole covers and frames shall be Department Type "A" U.S.F.&F No. 310 as manufactured by U.S.F. Fabricating, Inc., Hialeah, Florida, or approved equal. The covers shall be cast labeled "SANITARY SEWER".

2.03 BRICK

A. Clay Brick: Bricks for manhole construction shall be dense, hard burned, common clay brick conforming to ASTM Standard C62, "Building Brick (Solid Masonry Units made from Clay or Shale)".

B. Concrete Brick: Concrete bricks shall conform to ASTM Standard C55, "Concrete Building Brick".

C. All bricks shall have true edges and sharp corners and shall have been cured for at least 14 days before being placed.

2.04 CONCRETE, MORTAR AND GROUT

See Section 17033, " Concrete, Mortar and Grout (Short)"

2.05 EMBEDMENT MATERIAL

Embedment material, for bedding, haunching and initial backfill, shall conform with the requirements of Section UC-300 “Gravity Sewer Pipe Foundation”.

2.06 MANHOLE

A. Shallow manholes shall be constructed of brick or precast concrete. All other manholes shall be constructed of precast concrete. See Section 02536, "Precast Manholes & Covers"

B. Castings for manhole frames, covers and other items shall conform to Subsection 2.02, above. Casting patterns shall conform to those designated in the Miami-Dade Water and Sewer Standard Details.

C. Concrete shall conform to Section 17033.

D. Brick for manhole construction shall be clay brick, in accordance with Subsection 2.03, above.

E. Cement mortar for manhole construction shall conform to Section 17033. It shall be mixed dry and then wetted to proper consistency for use. No mortars that have stood for more than one hour shall be used. Brick manholes shall be coated with 3/4-inch thickness of mortar both inside and outside.

F. The invert channels shall be formed of brick or brick rubble thoroughly bedded and covered with sand-cement grout, accurately shaped to a semicircular bottom conforming to the inside of the adjacent sewer section. Steep slopes outside the invert channels shall be avoided. Changes in size and grade shall be made gradually and evenly. Changes in the direction of the sewer or entering branch shall be a smooth curve with radius as long as practical.

G. Frames and covers shall be set accurately to grade with a minimum of 3 and a maximum of 5 courses of brick provided as a leveling course. It shall be the Contractor's responsibility to assure that the frames and covers are set to match existing and/or proposed finish paving grades at the manhole locations.

H. For PVC Sewers:

1. The first joint at both influent and effluent sewers at each manhole, including service laterals, shall consist of an approved manhole coupling grouted into the manhole wall, and providing a continuous watertight elastomeric gasket seal between the coupling and the pipe inserted therein. The coupling shall have an increasing tapered interior from the gasket groove to allow flexibility for the pipe in the event of future settlement of the manhole or pipeline.

2. The first length of PVC pipe into or out of the manhole shall be 2-feet long, maximum, and shall be either plain-end by plain-end, or plain-end by bell. In the first option, the next joint shall be a double bell PVC repair coupling (no stop) with a maximum 1-inch gap between the pipes inserted therein. In the latter option, the next joint shall be another 2-foot long section, maximum, of plain-end by bell PVC pipe.

I. For Ductile Iron and Vitrified Clay Sewers

The first length of pipe into or out of the manhole shall be a 2-foot length of plain end by plain end ductile iron pipe (i.e. 2' as measured from the outside wall) grouted directly into the opening in the manhole wall. This P.E. X P.E. short shall be joined to the spigot end of an adjacent ductile iron sewer main by use of a ductile iron solid sleeve. In the instance of a vitrified clay main, the ductile iron P.E. X P.E. short manhole stub out shall be joined to the V.C. spigot by use of a double hub connector for vitrified clay pipe. Note that C-900 PVC repair couplings shall not be used in ductile iron or vitrified clay mains.

J. Where shown on the drawings, the Contractor shall provide stub-outs for future extensions. Both ends of all such stubouts shall be closed with specified PVC plugs.

K. Precast manholes shall conform to Section 02536, "Precast Manholes & Covers". In precast concrete manholes, holes for sewer line connections, with a diameter equal to the outside diameter of the connecting sewer plus an additional four inches (4"), shall be formed in the manhole walls. No cutting or chipping at pre-formed holes, or cutting additional holes in precast concrete walls will be allowed.

L. A minimum of three to a maximum of five courses of brick shall be constructed atop each manhole corbel.

M. Prior to acceptance of manhole, the Contractor shall verify that he has installed required manhole accessories and coating/lining (See Section 02536)

2.07 POLY (VINYL CHLORIDE) PIPE

Pipe for use in gravity sewer systems shall be Vitrified Clay, Ductile Iron with polyethylene or ceramic epoxy (Protecto 401) lined , PVC SDR 35, or AWWA C900, C905 PVC as shown on the plans or called out elsewhere herein. For further information on these types of pipe, see Section 15060, “Piping and Fittings”.

2.08 REINFORCING STEEL

A. Bar reinforcement for concrete structures shall conform to the requirements of ASTM Standard A615 "Deformed and Plain Billet-Steel Bars for Concrete Reinforcement", Grade 60, Deformed, except that steel manufactured by the Bessemer Process will not be accepted. Wire mesh reinforcing for concrete paving or driveway repairs, if required, shall be welded wire fabric meeting the requirements of ASTM Standard A185, "Steel Welded Wire, Fabric, Plain, for Concrete Reinforcement".

B. The Contractor shall furnish the Department with manufacturer's test certificates showing the steel to meet the above requirements, in addition to which the Department may take representative samples from the material on the job and have them tested by an independent testing laboratory. Completely detailed shop drawings and bending schedules shall be submitted by the Contractor for the approval of the Engineer of Record. Such approval shall be obtained before the bars are cut and bent.

2.09 DUCTILE IRON CASING PIPE

Ductile iron casing pipe shall be ANSI/AWWA Standard C151/A21.51, Class 50, no lining required. Casing pipe shall be one size larger than PVC pipe to be encased, unless otherwise approved.

2.10 DUCTILE IRON SEWER PIPE

A. Ductile iron sewer pipe shall be ANSI/AWWA Standard C151/A21.51, Class 53 for 6-inch, Class

52 for 8-inch, Class 50 for 10-inch through 15-inch. Ductile iron pipe shall conform to Section 15060.

B. All ductile iron pipe and fittings 8-inches and larger in diameter for use in force mains and gravity sewers, except riser pipes, shall be delivered with either heat fused virgin polyethylene lining or ceramic epoxy lining (See Section 15060). The only ceramic epoxy material approved by the Department at this time is a high-build multi-component Amine cured Novalac epoxy, Protecto 401, by Vulcan Painters, Inc. of Bessemer, AL 35021.

2.11 MISCELLANEOUS MATERIAL

A. The Contractor shall furnish and install all miscellaneous material and appurtenances required for a complete installation. Section 15065 specifies material necessary for a complete installation, not specified herein. These material, including the following, shall be installed when required, whether shown on the Plans or not.

1. Paint, Bituminous
2. Caulking Compound
3. Manhole Couplings
4. PVC double bell repair couplings, No-stop (sleeves)
5. PVC double bell transition couplings or adapters PSM SDR-35 PVC Sewer Pipe to ductile-iron or AWWA C900 CI-PVC Pressure pipe.
6. Stainless steel repair clamps, with stainless steel bolts

PART 3 - EXECUTION

3.01 PIPE INSTALLATION, GENERAL

A. Proper and suitable tools and appliances for the safe convenient handling and laying of pipe shall be used and, in general, conform with manufacturer's recommendations. At the time of laying, the pipe shall be examined carefully for defects, and should any pipe be discovered to be defective after being laid, it shall be removed and replaced with sound pipe by the Contractor at his expense.

B. Pipe and fittings shall, at all times, be handled with great care to avoid damage. In loading and unloading, they shall be lifted with cranes or hoists or slid or rolled on skidways in such manner as to avoid shock. Under no circumstances shall this material be dropped or allowed to roll or slide against obstructions. Pipe an other material shall be distributed along the right-of-way in advance of installation only to the extent approved by the Department. Such materials shall be so placed as to keep obstruction to traffic minimum.

C. Upon satisfactory completion of the pipe bedding, a continuous trough for the pipe barrel and recesses for the pipe bells, or couplings, shall be excavated by hand digging. When the pipe is laid in the prepared trench, true to line and grade, the pipe barrel shall receive continuous, uniform support with no pressure being exerted on the pipe joints from the trench bottom.

D. Pipe shall be installed in accordance with the manufacturer's recommendation. Before being lowered into the trench, the pipes and accessories shall be carefully examined and the interior of

the pipes shall be thoroughly cleaned of all foreign matter and other deleterious materials by methods acceptable to the Department. During suspension of work, for any reason, at any time, a suitable stopper shall be placed in the end of the pipe last laid to prevent mud, dirt, groundwater or other foreign material from entering the pipe. Any pipe which is disturbed or found defective shall be immediately removed and replaced with sound pipe.

E. Gaskets shall be thoroughly checked for breaks, cuts or other damage, and shall be free of oil, grease, dirt or other foreign matter. Pipe joints shall be assembled with care. Lubricant, if required shall be as recommended by the manufacturer of the pipe, and shall have no deteriorating effects on the gasket and pipe materials. If assembly is under water, lubricant recommended by the manufacturer for underwater use is required.

F. Good alignment of the pipe is required for assembly. Align the spigot to the bell of the previously laid pipe and insert the spigot into the bell until it uniformly contacts the gasket. Apply steady pressure until the spigot easily slips through the gasket. Do not push or swing the spigot into the bell. Smaller diameter pipe and fitting may be assembled manually. Mechanical means such as bars and blocks, ratchets or jacks shall be used for joining larger pipe and fittings. Power equipment such as a backhoe bucket, shall not be used to assemble pipe and fittings, since excessive force may damage the gasket or bell.

G. Cutting the pipe in the field shall be done by the Contractor in a neat and workmanlike manner using manual or power saws. The pipe shall be marked around its entire circumference before cutting to assure a square cut. After cutting, the end shall be beveled with a beveling tool, rasp, or other approved equipment, to the proper taper. Mark the proper insertion depth on the cut and beveled end before installing the cut pipe into the pipeline. Pipe laying shall proceed up-grade from the lowest point of the proposed system, with spigot ends pointing in the direction of flow.

H. All pipe shall be laid straight, true to the lines and grades shown on the Plans, or matching existing grade, in each section between manholes. The pipe shall be laid so that the identification markings are located on the top of the installed pipelines.

I. Each individual length of pipe shall be solidly and evenly bedded and haunched throughout its length on a prepared bed on the floor of the trench and not supported in position on blocks or wedges. Pipe shall only be laid when the two preceding lengths have been thoroughly embedded in place to prevent any movement or disturbance of the finished joint. Any pipe which is disturbed or found to be defective after laying shall be taken up and relaid or replaced.

J. Any work within the pipe and fittings shall be performed with care to prevent damage to the interior wall of the pipe. Damaged interior walls shall be repaired or the pipe section or fitting replaced as required by the Department. No cables, lifting arms, hooks or other devices shall be inserted into the pipe or fitting. All lifting, pulling or pushing mechanisms shall be applied to the exterior of the pipe or fitting.

K. After pipe has been laid, reviewed and found satisfactory, sufficient backfill shall be placed along the pipe barrel to hold the pipe securely in place during the conduction of the required tests.

3.02 INSTALLATION OF DUCTILE IRON AND VITRIFIED CLAY PIPE

A. Installation of gravity sewers shall conform to the applicable requirements of ANSI/AWWA Standard C600-93, "Installation of Ductile Iron Water Mains and Appurtenances".

B. Cutting of ductile iron pipe for fittings and other connections shall be done by the Contractor in a neat and workmanlike manner without damage to the pipe, the lining, or the coating. Pipe shall be cut with a mechanical pipe saw. After cutting the pipe, the plain ends shall be filed to remove all sharp edges and burrs.

C. Polyethylene encasement of valves, cast iron pipe and fittings, if required by the Department, shall be installed in accordance with ANSI/AWWA C105/A21.5, "Polyethylene Encasement for Ductile-Iron Piping for Water and Other Liquids" Method A, B or C.

D. If any difficulty is experienced in assembling lengths of pipe together in the trench, the pipe sections shall be tried on the surface of the ground and each length of pipe plainly marked for position and sequence in which they are to be installed.

E. Ductile iron solid sleeves shall be used to connect D.I. pipe spigots to existing D.I. manhole stub spigots. Vitrified clay double hub connectors shall be used to connect D.I. manhole stub outs to V.C. pipe spigots.

F. All bolts, nuts, gaskets or other joint materials for use in the pipeline shall be properly protected.

G. Gaskets shall be properly stored, and care shall be exercised to keep them away from heat, light, oil, gasoline or other petroleum products. Gaskets shall be kept clean at all times and not handled with greasy or dirty hands.

3.03 INSTALLATION OF POLY VINYL CHLORIDE (PVC) PIPE

A. Each length of pipe, immediately prior to being placed in position in the trench, shall be inspected, cleaned and prepared for installation. Gaskets shall be thoroughly checked for breaks, cuts or other damage, and shall be free of oil, grease, dirt or other foreign matter. Pipe joints shall be assembled with care. Lubricant, if required, shall be as recommended by the manufacturer of the pipe, and shall have no deteriorating effects on the gasket and pipe materials. If assembly is underwater, lubricant recommended by the manufacturer for underwater use is required. Good alignment of the pipe is required for assembly. Align the spigot to the bell of the previously laid pipe and insert the spigot into the bell until it uniformly contacts the gasket. Apply steady pressure until the spigot easily slips through the gasket. Do not push or swing the spigot into the bell. Small diameter pipe and fittings may be assembled manually. mechanical means such as bars and blocks, ratchets or jacks shall be used for joining larger pipe and fittings. Power equipment, such as backhoe bucket, shall be not be used to assemble pipe and fittings, since excessive force may damage the gasket or bell.

B. Cutting the pipe in the field shall be done by the Contractor in a neat and workmanlike manner using manual or power saws. The pipe shall be marked around its entire circumference before cutting to assure a square cut. After cutting, the end shall be beveling tool, rasp, or other approved equipment, to the proper taper. Mark the proper insertion depth on the cut and beveled end before installing the cut pipe into the pipeline. Pipe laying shall proceed up-grade from the lowest point of the proposed system, with spigot ends pointing in the direction of flow. All pipe shall be laid straight, true to the lines and matching existing grade, in each section between manholes. The pipe shall be laid so that the identification markings are located on the top of the installed pipelines. At all times when work is not in progress, the exposed ends of all pipes shall be fully protected by an approved stopper to prevent groundwater, dirt, rocks or other substances from entering the pipe.

3.04 PIPE-TO-PIPE CONNECTIONS

Pipe-to-pipe connections shall be made by using solid sleeves for Ductile Iron, double hub

connectors for vitrified clay and double bell couplings for PVC.

3.05 PIPE-TO-PIPE MANHOLE CONNECTIONS

When a sound pipe stub-out exists at a manhole to which connection is to be made, a pipe-to-pipe connection shall be made as described above. If a stub-out is not present or is faulty, an opening shall be cut in the manhole wall and the connection made. The connection shall be constructed as specified above in paragraphs 2.06 H and I with the pipe material/method chosen to match that of the new line. The invert/shelf area inside the manhole shall be cut and reshaped as necessary to construct the new channels in compliance with WASD Standard Details

3.06 GRAVITY SEWER SERVICE LATERALS

See Section UC-310, "Gravity Sewer Service Laterals".

3.07 MODIFICATIONS OF EXISTING MANHOLES

See Section UC-330, "Repairs to Department Sewers"

3.08 EXCAVATION

See Section 02315, "Trenching and Backfilling for Piping Systems"

3.09 SEWER PIPE FOUNDATION

See Section UC-300, "Gravity Sewer Pipe Foundation"

3.10 CLEANING AND TESTING

See Section UC-370, "Cleaning and Testing Gravity Sewers"

3.11 SEWERAGE REMOVAL

See Section UC-290, "Removal of Sanitary Sewerage and Debris"

3.12 SEWAGE FLOW CONTROL

See Section UC-320, "Sewerage Bypass Pumping and Flow Control"

3.13 REPAIR OF DAMAGE TO DEPARTMENT MAINS & SEALING LEAKS

See Section UC-330, "Repairs to Department Sewers"

3.14 DEFLECTION TEST

See Section UC-350, "Sewer Deflection Test"

END OF SECTION

SECTION UC-290

REMOVAL OF SANITARY SEWERAGE AND DEBRIS

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish all labor, material and equipment required for the removal of sanitary sewer mains and appurtenances.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 01100 - Special Project Procedures
Section 02315 - Trenching and Backfilling for Piping Systems

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 REMOVAL OF SANITARY SEWER

A. During cleaning operations and removal sewer mains, all sludge, dirt, sand, rock, grease, laitance (lime scum), roots, mortar, unsound concrete and other materials shall be completely removed. If the steel reinforcing is exposed, the Contractor shall request guidance from the Engineer of Record.

B. Under no circumstances shall sludge or other debris removed during cleaning or sewer main removal operations be dumped or spilled into the streets, ditches, storm drains or other sanitary sewers. However, water decanted from removed solids shall be returned to the sewer.

C. The Contractor is advised that he shall not dispose of this material by dumping on private or public property, by sale to others, or any means other than those given below. Any load of material, or any portion thereof, disposed of in a non-permitted fashion will result in a charge to the Contractor in the amount of $500.00 per load, or any portion thereof, which sum will be deducted by the Department from any monies due the Contractor. Additionally, the Contractor shall be backcharged for any fines, penalties, or other costs or damages imposed upon the City any agency or private party as a result of improper disposal by the Contractor.

D. The Contractor shall keep his haul route and work area(s) neat and clean and reasonably free of odor, and shall bear all responsibility for the cleanup of any spill which occurs during the transport of cleaning or surface preparation by-products and the cleanup of any such material which is authorized by or pursuant to this Contract and in accord with applicable law or regulations. The Contractor shall immediately cleanup any such spill or waste. If the Contractor fails to cleanup

such spill or waste immediately, the Department shall have the right to cleanup or arrange for its cleanup and shall charge to the Contractor all costs, including administrative cost and overhead, incurred by the Department in connection with such cleanup. The Department shall also charge to the Contractor any costs incurred or penalties imposed on the Department as a result of any spill, dump or discard. Under no circumstances is this spilled material to be discharged into the waterways or any place other than where authorized to do so by the appropriate authority. The term "Contractor" as used in this section shall include the Contractor's subcontractors and other Contractors.

D. The general requirements for vehicles hauling such waste materials are as follows: Transport vehicles must be of type(s) approved for this application by the political jurisdiction involved. General requirements are that the vehicles have watertight bodies, that they may be properly equipped and fitted with seals and covers to prohibit material spillage or drainage, and that they be cleaned as often as is necessary to prevent the deposit of material on the roadways. Vehicles must be loaded within legal weight limits and operated safely within all traffic and speed regulations.

E. The routes used by the Contractor for the conveyance of this material on a regular basis shall be subject to approval by the governing authority having jurisdiction over such routes.

F. All waste materials and debris removed during these operations shall be, if sufficiently dewatered (at least 20 percent solids and no visible moisture), conveyed directly to the County's Class I sanitary landfill, the South Dade Solid Waste Disposal Facility, 24000 S.W. 97th Avenue, Dade County, Florida. Solids which are too wet for direct deposit at the landfill shall be conveyed to and deposited on the Plant's "cleanout" pad established to receive and drain/dry this material. All cost for such removal and disposal, including tipping fees, shall be paid by the Contractor.

G. Material cleaned from the sewer shall be removed from the site for disposal as each truck is filled and at the end of each work shift.

H. Copies of records of all disposal shall be furnished to the Engineer of Record, indicating disposal site, date, amount, and a brief description of material disposed. Under no circumstances will the Contractor be allowed to accumulate debris, etc., on the site of work beyond the stated time, except in totally enclosed containers and as acceptable to the Department.

END OF SECTION

SECTION UC-300

GRAVITY SEWER PIPE FOUNDATION

PART 1 - GENERAL

1.01 WORK INCLUDED

The work under this Section includes the installation of gravity sewer pipe foundations.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 01100 - Special Project Procedures
Section 02315 - Trenching and Backfilling for Piping Systems

PART 2 - PRODUCTS

2.01 Material: See Part 2 of Section 02315

PART 3 - EXECUTION

3.01 GENERAL

A. Excavation shall proceed in accordance with Section 02315, "Trenching and Backfilling for Piping Systems".

B. Gravity sewers shall be constructed using Vitrified Clay, Poly Vinyl Chloride (PVC) (SDR 35 or AWWA C900) pipe and fittings or ductile iron pipe and fittings, as shown on the approved Plans (See Section 15060, "Piping and Fittings" for D.I.P. or Section UC-250, “Gravity Sewer Systems” for PVC).

3.02 FOUNDATIONS FOR V.C. AND D.I.P. AT DEPTH OVER 10 FT. OR BELOW WATER

A. Sewer pipe constructed at a depth greater than 10 feet, or with a trench bottom below groundwater, shall have a rockbed foundation, in accordance with Section 02315. The trench shall be excavated to a depth of at least 6 inches below the bottom of the pipe, the trench backfilled with a layer of rockbed firmly compacted, the pipe solidly bedded and additional rockbed firmly packed and thoroughly compacted under and around the pipe up to the springline.

B. See Subsection 3.03, below, for sewer pipe constructed at a depth less than 10 feet and trench bottom above groundwater.

3.03 FOUNDATIONS FOR V.C. AND D.I.P. AT DEPTH ABOVE 10 FT. AND ABOVE WATER

Pipe constructed at cut ranges less than 10 feet, and the trench bottom is above ground water, shall be installed according to the following conditions:

A. Installation in Rock Bottom

Where rock is encountered at the bottom of a trench in which pipe is to be installed, the excavation shall be extended to a depth at least 6 inches below the bottom of the pipe and shall be backfilled with selected backfill material in 6-inch layers, with each layer being firmly compacted, and with the final layer carefully graded and compacted at the proper elevation to provide continuous support for the pipe barrels. Where pipe bells will be located, depressions shall be excavated in the trench bottom to provide clearance under the bell or socket.

B. Installation in Soil Bottom

Where rock is not encountered at the bottom of a trench excavation, and the soil is satisfactory for pipe foundation, in the opinion of the Engineer, excavation shall be halted at an elevation slightly above that for bedding the pipe, and the pipe bed carefully excavated by hand in the undisturbed trench bottom to provide continuous bearing for the pipe barrels and clearance under the bells or sockets, or machine excavation may extend slightly below the elevation for bedding the pipe with the trench bottom carefully backfilled and compacted as specified.

3.04 FOUNDATIONS FOR PVC GRAVITY SEWERS

Embedment material (for bedding, haunching and initial backfill) shall be Class I in stable soil conditions, and Class II in unstable soil conditions, as modified herein.

A. Class I materials shall be angular, 1/4 to 3/4 inch graded stone including washed and graded limerock.

B. Class II materials shall be well graded coarse sands and gravels with the following gradation requirements:

Sieve Size	Percent Passing By Weight
3/4	100
3/8	85-100
#8	40-60
#30	5-30
#100	0-2

END OF SECTION

SECTION UC-310

GRAVITY SEWER SERVICE LATERALS

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish all labor, material, equipment and appurtenances necessary for the installation of gravity sewer service laterals, complete, in accordance with these specifications.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 02315 - Trenching and Backfilling for Piping Systems
Section UC-250 - Gravity Sewer Systems

1.03 QUALITY ASSURANCE

A. Lateral sewers shall be installed in accordance with all the applicable requirements for pipe installation. Branch fittings shall be installed in the main line sewer as it is constructed, in the locations and configuration of the original laterals or as designated by the Engineer.

B. All excavations shall be executed in accordance with the South Florida Building Codes, OSHA requirements, the State of Florida Trench Safety Act (TSA), the State of Florida Trench Safety Act (TSA) and all applicable requirements of Section 01016, including notification of the Sunshine State One-Call Center (1-800-432-4770), 48 hours prior to any excavation.

PART 2 - PRODUCTS

See Part 2 of Section UC-250, "Gravity Sewer Systems" & "Tightness Standards" under Section UC-370.

PART 3 - EXECUTION

3.01 INSTALLATION OF LATERALS

A. Service laterals shall be installed in accordance with the requirements for gravity main installation. Branch fittings shall be installed in the main line sewer as it is constructed. The branch fittings shall be either a tee set for a modified riser when the top of the sewer is 7 feet or deeper, or a wye set and connected as shown in the Miami-Dade Water and Sewer Department's Standard Details SS 1.0 and 2.0, respectively. In no case shall the branch be covered until its location has been measured and recorded.

B. Where a service lateral enters a manhole at an elevation of 2 feet or more above the

sewer main invert, a drop connection shall be required.

C. Each service lateral shall be plugged at the point shown on the Standard Details. Plug shall provide a watertight seal, without the use of adhesives or epoxies, and shall be subject to approval by the Department. In no case shall a service lateral be covered until its exact location is measured and recorded, nor until a two-inch square by two feet long, pressure-treated pine stake, with the top stained or painted green, has been set by the Contractor at the end of the service lateral.

D. The Contractor shall not excavate trenches for service laterals to both sides of the street at the same time unless written permission has been secured in advance to close the street.

3.02 REMOVAL AND REPLACEMENT OF LATERALS

A. Excavate in accordance with Section 02315, "Trenching and Backfilling for Piping Systems"

B. The existing laterals shall be hand excavated to a joint, disassembled, or if necessary saw cut, clean and square and the appropriate adapter installed to connect the replacement lateral. Care shall be taken to maintain the slopes of the existing lateral. The lateral shall be removed and replaced from the main line to a point along the existing lateral determined by the Engineer of Record to be in acceptable condition.

C. Placement of bedding/cover materials in the trench shall be the same for laterals as provided in Section UC-300, "Gravity Sewers Pipe Foundation".

END OF SECTION

SECTION UC-320

SEWERAGE BYPASS PUMPING AND FLOW CONTROL

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish and install all labor, material and equipment necessary to control the flow of sewage in accordance with this Section. This Section also contains provisions regarding surcharging sewers and sewage spills.

1.02 SUBMITTAL

The Contractor shall submit complete, detailed plans for this aspect of the work to the City for approval.

1.03 SPECIAL PROVISIONS

A. All applicable requirements in the following specification sections shall apply during execution of the work:

Section 01100 - Special Project Procedures
Section 01750 - Maintenance of Traffic and Public Streets

B. For projects where twenty-four (24) hour by-pass pumping of sewage is required, the Contractor shall provide personnel for manning and maintenance.

C. The Contractor shall be completely responsible for conditions at the job site, until acceptance of the project; he shall provide for traffic safety, traffic control and protection of property; and he shall be directly responsible to property owner(s) for any damage, injury, expense, loss, suits, or claims in accordance with Section 01016, "Safety Requirements and Protection of Property".

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 BYPASS PUMPING/FLOW CONTROL, GENERAL

A. The Contractor shall be prepared to bypass pump the sewage effluent as a part of his operations, if necessary. The Contractor shall provide all necessary pumps, piping, and other equipment to accomplish this task with each mobilized crew and shall be prepared to perform all construction; obtain all permits; pay all costs; and perform complete restoration of all existing facilities to equal or better condition and to the satisfaction of the City. Bypass

pumping will occur where high flow rates and insufficient upstream storage capacity make this necessary. All costs of accomplishing the bypass pumping tasks, at whatever volume, and all associated work, such as, for example, construction of intake and discharge points, and restoration, shall be considered as incidental to the work.

B. When sewer line flows at the upstream manhole of the gravity main being replaced or the pump station wet well are above the maximum allowable requirements for the replacement, the flows shall be reduced to the levels indicated by one of the following methods: manual operation of pumping stations by the City forces, by the Contractor plugging/blocking of the flows, or by the Contractor pumping/bypassing of the flows all as acceptable to the City.

C. In some applications, the sewer may be plugged and wastewater contained within the capacity of the collection system. This shall only be done when it has been determined that the system can accommodate the surcharging without any adverse impact.

D. When sewer line flows at the upstream manhole of the line being removed and replaced, in the opinion of the Engineer of Record, are too excessive to plug while the work is being performed; the Contractor shall submit for approval by the City, a written plan and pump/ bypass the flow.

E. For all service lateral reestablishment, testing and sealing, the depth of flow within the sewer shall not exceed that shown below for the respective pipe sizes as measured in the manhole.

	Maximum Depth of Flow
4-inch - 12-inch Pipe	25 percent of pipe diameter
15-inch - 18-inch Pipe	30 percent of pipe diameter

3.02 PLUGGING AND BLOCKING

A sewer line plug shall be inserted into the line at a manhole upstream from the section being removed and replaced or pump station wet well being re-worked. The plug shall be so designed that all or any portion of the operation flows can be released. During removals and replacement, the flows shall be shut off and monitored or pumped / bypassed, as acceptable to the City. After the work tasks have been completed, flows shall be restored to normal.

3.03 PUMPING AND BYPASSING

A. When pumping / bypassing is required, as approved by the City the Contractor shall supply the necessary pumps, conduits and other equipment to divert the flow of sewage around the sewer section or pump station in which work is to be performed. The bypass system shall be of sufficient capacity to handle existing flows plus additional flow that may occur during periods of rain storms. The Contractor shall be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing system. A "setup" consists of the necessary pumps (including backup pumps if required), conduits and other equipment to divert the flow of sewage around the pump station or sewer section, from the start to finish of work performed in the pump station or sewer section.

B. Pumps and equipment shall be continuously monitored by a maintenance person capable of starting, stopping, refueling and maintaining these pumps during the construction. If pumping

is required on a 24-hour basis, engines shall be equipped in a manner to keep noise to a minimum. In the instance of work on a pump station, the Contractor may be required to provide, at his sole expense, a temporary electric service, electrically driven pump(s) and engine driven backup pump(s).

3.04 SURCHARGING SEWERS

A. Where the raw sewage flow is blocked or plugged, sufficient precautions must be taken to protect the public health. Upstream flow shall be monitored. The sewer lines shall also be protected from damage. The following occurrences will not be allowed:

1. No sewage shall be allowed to back up into any homes or buildings.

2. No sewage shall overflow any manholes, cleanouts or any other access to the sewers.

3. Users upstream of the repair area shall be able to use all their water and sewer utilities without interruption.

B. If any of the above occur or are expected to occur, the Contractor shall bypass pump to alleviate one or all of the conditions. Additionally, the Contractor is required to observe the conditions upstream of the plug and be prepared to immediately start bypass pumping, if needed.

3.05 PUMP DISCHARGE

Any sump pumps, bypass pumps, trash pumps or any other type pump which pulls sewage/water or any type of material out of the manhole or sewer shall discharge this material into another manhole, or appropriate vehicle or container acceptable to the Engineer of Record. Under no circumstances shall this material be discharged, stored or deposited on the ground, swale, road or open environment.

3.06 MAINTENANCE OF TRAFFIC FOR BYPASS PUMPING

The Contractor shall take appropriate steps to ensure that all pumps, piping and hoses that carry raw sewage are protected from vehicular traffic and pedestrian traffic. Maintenance of traffic shall be performed in accordance with Section 01750, "Maintenance of Traffic and Public Streets"

3.07 SEWAGE SPILLS

A. In the event, during any form of "Sewage Flow Control," that raw sewage is spilled, discharged, leaked or otherwise deposited in the open environment, due to the Contractor's work, the Contractor is responsible for any cleanup of solids and disinfection of the area affected and liability for any claims. This work shall be performed at the Contractor's expense with no cost to the City.

B. The Contractor is also responsible for notifying the sewer system maintenance personnel and complying with any and all regulatory requirements in regard to the size of spill with no cost to the City.

C. The Contractor shall be backcharged for any fines, penalties or other costs or damages imposed upon the City by any agency or private party as a result of a spill or improper discharge by the Contractor.

END OF SECTION

SECTION UC-330

REPAIRS TO DEPARTMENT SEWERS

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish all labor, material and equipment required to repair the Department's sewers due to damage caused by his operations or as required to perform necessary modifications to existing installations.

1.02 RELATED SECTIONS

Section 01016 - Safety Requirements and Protection of Property
Section 01100 - Special Project Procedures
Section 02315 - Trenching and Backfilling for Piping Systems
Section UC-250 - Gravity Sewer Systems

PART 2 - PRODUCTS

2.01 CHEMICAL JOINT AND CRACK SEALING MATERIALS FOR ACTIVE LEAKS

A. Chemical joint and crack sealing materials used on this Project shall have the following properties: react quickly to form a permanent watertight seal; resultant seal shall be flexible and immune to the effects of wet/dry cycles; non-biodegradable and immune to the effects of acids, alkalis, and organics in sewage; component packaging and mixing compatible with field conditions and worker safety; extraneous sealant left inside pipe shall be readily removable.

B. Chemical joint sealing material shall be acrylic resin type and shall be furnished with activators, initiators, inhibitors and any other materials recommended by the manufacturer for a complete grout system. Sealing grout shall be furnished in liquid form in standard manufacturer's containers. Sealing grout shall be AV-118 Duriflex manufactured by Avanti International, Houston, Texas (1-800-877-2570) or approved equal.

PART 3 - EXECUTION

3.01 REPAIRS DUE TO CONTRACTOR'S OPERATIONS

A. The Contractor shall exercise caution to insure that his operations do not damage the existing sewer. The Contractor shall be responsible for repairs to the sewers which are necessary due to damage caused by the Contractor's operations. Such repair shall be considered as part of the work.

B. Damaged pipe or manholes shall be replaced in kind or repaired by the Contractor to the satisfaction of the Department, with emphasis on providing a good, solid foundation for the new pipe. Temporary paving and permanent paving repairs shall also be made by the Contractor.

C. Contractor shall immediately repair any damage using methods satisfactory to the Engineer. Repairs shall proceed on a 24-hour/day, seven day/week basis if so directed by the Department. If the Contractor fails to immediately repair any such damage, the Department shall have the right to make the repair or have the repair made, and may charge to the Contractor all costs, including administrative costs and overhead, incurred by the Department in connection with the repair. The Department shall also charge to the Contractor any costs incurred or penalties imposed on the Department as a result of such damage.

D. The Contractor is strongly advised not to position equipment having greater than an AASHTO H-20 loading above the sewer line. Repair of any damage caused by such equipment loads shall be at the Contractor's expense.

E. Any repairs requiring excavation, except emergency work, shall have prior approval of the Engineer.

3.02 MODIFICATION OF EXISTING MANHOLES

Where modification of existing manholes are required to replace existing mains the following requirement shall be adhere to:

A. After satisfactory replacement and testing of mains all interior concrete surfaces of the modified manhole shall be high pressure washed and seal coated with 2 coats of a coal tar epoxy, Kop-Coat Company Bitumastic 300-M, or approved equal. Each coat shall have a dry film thickness of 8 mils, minimum. The requirements of this paragraph are not applicable to existing manholes to lined with a Department approved liner. (See Section 02536 for additional requirements.)

B. The modifications to the invert channels of the manhole shall be formed of brick or brick rubble thoroughly bedded and covered with sand-cement grout, accurately shaped to a semi-circular bottom conforming to the inside of the adjacent sewer section. Steep slopes outside the invert channel shall be in the direction of the sewer or entering branch shall be a smooth curve with radius as long as practical

C. Gravity sewer shall connect to the manholes in accordance with Miami Dade Water and Sewer Department's Standard Details and Section UC-250.

3.03 SEALING OF POST-REPLACEMENT LEAKS

In the event it becomes necessary to seal sewer pipe to stop leakage after sectional replacement, the following procedure shall be used:

A. Chemical joint or crack sealing material specified above or as approved by the Department shall be furnished and satisfactorily installed. The Contractor shall modify his equipment as necessary to seal the leaks, however both his equipment and sealing method shall meet the approval of the Department prior to use.

B. Extreme caution shall be utilized during leak sealing (pressure) operations in order to avoid damage of the sewer pipe. If any damage occurs, it shall be repaired as specified in Subsection 3.01, above, and to the satisfaction of the Department. Excessive pumping of grout which might plug a service lateral shall be avoided. Any service laterals blocked by the

grouting operation shall be cleared immediately by the Contractor.

END OF SECTION

SECTION UC-350

SEWER DEFLECTION TEST

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall test new sewer system installations, completely and satisfactorily, prior to final acceptance by the Department.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 GENERAL

All testing performed by the Contractor shall be witnessed by the Department Inspector, who shall be notified a minimum of twenty-four (24) hours in advance of the test.

3.02 DEFLECTION TESTS

A. Deflection testing of the new sewer shall be performed by the Contractor. No section of sewer shall be tested before at least 30 days have elapsed from the date of completed backfill over the section. The pipe will be observed for evidence of obvious ovality, deflected or offset joints, and other pipe defects.

B. The deflection, or deformation of the pipe due to external loading, shall not exceed approximately 7.5 percent. All labor, materials and equipment necessary for cleaning the sewers and performing the deflection testing shall be furnished by the Contractor. However, prior to the test, the Contractor's mandrel must pass a ring gauge test, performed by the Inspector at the site using the Department's ring gauge, to show that the mandrel is properly sized in accordance with the mandrel sizes listed hereinbelow 7.5 percent deflection.

C. Deflection testing the system may also be performed by the Department, at its cost, at any time during the Warranty or Contract Bond period, and the deflection in any pipe shall not exceed 7.5 percent.

D. Deflection shall be determined by passing an approved go/no go mandrel through the gravity sewer main. Deflection will be based on the average inside diameter as presented in ANSI/AWWA C900, "AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4 inches through 12 inches, for Water Distribution:", Table 1, for Poly (Vinyl Chloride) (PVC) C 900 pipe. However, no mandrel testing is required for AWWA C900 PVC pipe installed with up to 14 feet of cover, in accordance with subsection 1.05-C of Section UC-005.

E. The deflection may also be based on the average inside diameter as presented in ASTM D3034, Table XI.I, for PSM SDR35 PVC sewer pipe. The mandrel sizes are listed as follows:

Pipe Size Nominal (inches)	Average Inside Diameter	Mandrel 7.5% Deflection
6	5.893	5.31
8	7.891	7.09
10	9.864	8.84
12	11.737	10.51
15	14.374	12.86

F. If any pipe fails the deflection test, performed by the Contractor or by the Department, unstable conditions and/or improper bedding will be assumed. The overly deflected pipe shall be removed and replaced by the Contractor, at his expense. Re-rounding of overly deflected pipe will not be allowed. A trench to unstable conditions, as shown on Department Standard Detail SS 18.0, shall be excavated and new pipe installed to unstable soil condition specifications. New replacement pipe shall be connected to existing pipe to remain with new double bell PVC repair couplings (no stop) with a maximum 1-inch gap between the pipes inserted therein. The couplings shall conform to the Specifications herein for PVC pipe and fittings. The Contractor shall furnish the Department with a new one year Warranty or Contract Bond guaranteeing the replacement work and materials under the same terms and conditions as the original new Warranty or Contract Bond. The new warranty period shall commence from the Department's acceptance of the replacement work performed by the Contractor.

END OF SECTION

SECTION UC-370

CLEANING AND TESTING GRAVITY SEWERS

PART 1 - GENERAL

1.01 SCOPE OF WORK

The Contractor shall furnish all material, labor and equipment necessary to clean and test gravity sewers and sanitary force mains and shall conduct all testing required, under the direction of the Engineer.

1.03 QUALITY ASSURANCE

Cleaning and testing shall be performed in strict accordance with these specifications.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 GENERAL

A. All drain and gravity sewer line segments or sections shall be separately and individually lamped and tested for infiltration and exfiltration, unless otherwise allowed by the Engineer. A line “segment” or “section” shall be defined as a run of pipe between a manhole and the next manhole either up or down stream of that manhole.

B. Each section of gravity pipe sewer, upon its completion or at such other time as the Engineer may direct, is to be cleaned, tested and inspected.

C. The allowable limits of infiltration or exfiltration or leakage for the drain or sewer lines, or any portion thereof shall not exceed the appropriate rate as specified in 3.04 “Tightness Standards”, below. Duration of tests shall be a minimum of two hours.

D. Since allowable leakage is defined in gallons per hour, testing shall be conducted in, at a minimum, two independent one-hour test periods. Testing shall continue for additional one-hour periods if during any subsequent test period leakage increases above that of any previous test period even if the leakage is within the allowable amount. Testing shall continue until the leakage stabilizes or decreases.

E. When allowed by the Engineer in writing, longer portions of the line may be tested. However, no more than three manhole sections or 1000 feet of sewer (whichever is the lesser) shall be tested at any one time.

F. When multiple sections of line are tested together as specified above, the leakage

shall be calculated based on the footage of the smallest segment being tested as if all of the leakage originated in the shortest segment of the group.

G. Prior to testing for infiltration, the system shall be pumped out so that normal infiltration conditions exist at the time of testing. The amounts of infiltration or exfiltration shall be determined by pumping into or out of calibrated drums, or by other approved methods.

H. The exfiltration test will be conducted by filling the portion of the system being tested with water to a level which will provide a minimum head of 2-feet in a lateral connected to the test portion, or, in the event there are no laterals in the test portion, a minimum difference in elevation of 5-feet between the crown of the highest portion of the drain or sewer and the test level.

I. If the ground water level is above the crown of the highest portion of the drain or sewer, the 5-foot differential shall be measured between the ground water level and the test level. Where insufficient depth of cover is available to produce a 5-foot differential, the maximum differential producible between ground water elevation and a test elevation set to avoid flow out of low manholes or into adjacent structures connected to the test section shall be used.

J. Where infiltration or exfiltration exceeds the allowable limits specified herein, the defective pipe, joints, or other faulty construction shall be located and repaired by the Contractor.

K. The Contractor shall locate and repair all leaks until the leakage is reduced to the limits specified. Any observed leaks or obviously defective joints or pipes shall be repaired or replaced as directed by the Engineer, even though the total leakage is below that specified above.

L. Lamping Test- Each section of sewer shall show, from each end, a full circle of light.

3.02 DEFECTS

In addition to the above requirements, the following shall also apply:

A. All repairs shown necessary by the tests are to be made, broken, cracked or obviously defected pipe replaced, all deposits removed, the sewer left true to line and grade, as herein specified, and entirely clean, free from lumps of cement, protruding gaskets, bulkheads, etc. and ready for use.

B. Each manhole or other appurtenance to the system shall have the specified size and form, be watertight, neatly and substantially made with the top set permanently to exact position and grade, and shall serve well and fully its intended use.

C. Any defects found in the system shall be corrected by the Contractor in accordance with the requirements of the Specifications or the MDWASD Design and Construction Standards, as approved by the Engineer.

D. In the event that a sewer line or structure, such as a manhole, leaks during the period that the Warranty or Contract Bond is in effect, the Contractor shall be required to return and replace it with a new section of pipe or manhole or, if approved by the Engineer, to eliminate infiltration leaks by external grouting or encasement. After the leaks have been stopped, all visible cracks shall be repaired inside the manhole.

3.03 ACCEPTANCE

A. No pipe installation will be accepted if the leakage is greater than that determined by the above requirements.

B. The Contractor shall locate and repair all leaks until the leakage is reduced to the limits specified. Any observed leaks or any obviously defective joints or pipes shall be repaired or replaced as directed by the Department, even though the total leakage is below that specified above.

C. The tests and repairs shall be continued or repeated until the Department is assured that the leakage into or from the section of line under test is less than the amount specified.

3.04 TIGHTNESS STANDARDS

Effective since 1987 (Per Public Notice No. 9), the Department adopted new tightness standards for gravity sanitary sewers and sanitary force mains to be installed within the it's service area. The new standards for maximum allowable exfiltration rates are to minimize the risk of contaminating the County's groundwater supplies in the Biscayne Aquifer. These standards are issued to comply with those adopted into Chapter 24 of the County Code by Ordinance 86-42, and to have leakage requirements for clay and PVC pipe materials. The term "cone of influence" as used below refers to limits of wellfield protection areas as defined the County. Tightness standards are specified below:

A. GRAVITY SANITARY SEWERS

The maximum allowable exfiltration, infiltration, or leakage in gravity sanitary sewers shall be as listed below, with no allowances for manholes or laterals. The duration of all tests shall be a minimum of two (2) hours. Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed. Only the piping materials listed for each specific area will be permitted in that area, including both gravity sanitary sewers and laterals. (Where reference is made to a "10 Day Travel Time" contact the Department or DERM for further information.)

1. Residential Zoned Areas

1.1a Within cone of influence and **outside** 10 Days Travel Time:

Mains: D.I.P. - 50 gpd/in. diameter/mile
C900 PVC - 50 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC, or

X.H.C.I.(Extra Heavy Cast Iron Soil Pipe)

1.1b Within cone of influence and **within** 10 Days Travel Time:

Mains and laterals shall only be D.I.P.

1.2 Outside of cone influence:

Mains: D.I.P. - 100 gpd/in. diameter/mile
C900 PVC - 100 gpd/in. diameter/mile
PVC - 100 gpd/in. diameter/mile
V.C.P. - 100 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC, PVC, or X.H.C.I. or V.C.P.

2. Commercial Zoned Areas

2.1a Within cone of influence and **outside** 10 Days Travel Time:

Mains: D.I.P. - 20 gpd/in. diameter/mile
C900 PVC - 20 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC or X.H.C.I.

2.1b Within cone of influence and **within** 10 Days Travel Time:

Mains and laterals shall only be D.I.P.

Note: In any event and any zoned areas, the Department may require D.I.P. based on minimum cover requirements, installation in grass areas or at depths of 14 feet or greater.

2.2 Outside of cone influence:

Mains: D.I.P. - 100 gpd/in. diameter/mile
C900 PVC - 100 gpd/in. diameter/mile
PVC - 100 gpd/in. diameter/mile
V.C.P. - 100 gpd/in. diameter/mile

Laterals: may be D.I.P., C900 PVC, PVC, or X.H.C.I. or V.C.P.

3. Industrial Zoned Areas

3.1 Within cone of influence:

Mains: D.I.P. - 20 gpd/in. diameter/mile

Laterals: may be D.I.P. or X.H.C.I.

3.2 Outside of cone influence:

Mains: D.I.P. - 100 gpd/in. diameter/mile
V.C.P. - 100 gpd/in. diameter/mile

Laterals: may be D.I.P., X.H.C.I. or V.C.P.

B. SANITARY FORCE MAINS - ALL AREAS

1. Sanitary force mains shall be constructed of either Protecto 401 lined ductile-iron pipe and fittings or prestressed concrete plastic lined (120° T.D.C. minimum) cylinder pipe and fittings meeting current Department Specifications.

2. No such ductile-iron pipe sanitary force main shall exfiltrate or leak at a rate greater than the allowable leakage rate specified in AWWA C600 (latest edition) at a test pressure of one hundred (100) psig. The duration of all test shall be a minimum of two (2) hours. Any observed leaks or any obviously defective joints or pipes shall be repaired or replaced even when the total leakage is below that allowed.

3. No such prestressed concrete cylinder pipe sanitary force main shall exfiltrate or leak at a rate greater than one-half (2) the allowable leakage rate specified for ductile iron pipe in AWWA C600 (latest edition) at a test pressure of one hundred (100) psig. The duration of all test shall be a minimum of two (2) hours. Any observed leaks or any obviously defective joints or pipes shall be repaired or replaced even when the total leakage is below that allowed.

4. See Section UC-170, "Cleaning and Testing of Main".

END OF SECTION

RESOLUTION NO. 24-XXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE CITY MANAGER TO IMPLEMENT A PILOT PROGRAM TO ELIMINATE FATS, OIL, AND GREASE (FOG) IN THE CITY'S SANITARY SEWER SYSTEM; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City of Opa-Locka ("City") is having increased problems with FOG in the sanitary sewer collection system; and

WHEREAS, this problem is more prevalent in areas with multi-family dwellings where more often fats, oils, and grease are disposed of improperly directly into the drains, which then coagulates and forms a solid lining in the sewer mains and laterals that results in clogs; and

WHEREAS, Fats, Oil and Grease (FOG) account for ninety-five percent (95%) of the sewer stoppages and pump station failures; and

WHEREAS, a proposed pilot program for the City aims to mitigate this concern at a cost of forty-eight thousand dollars ($48,000.00) for a six (6) month period; and

WHEREAS, In-Pipe Technology is a sole source provider that utilizes the science of dosing with microbes to eliminate FOG their microbe dosing system is a self-contained unit that can be deployed in a sewer manhole; and

WHEREAS, other systems require weekly or monthly direct dispensing of liquid chemicals which are corrosive and present a safety/health hazard for City employees. Additionally, microbes used in the treatment process reach end-of-life in the wet well of the pump station, since they cannot survive in an environment devoid of oxygen, which is the case in a force main; and

WHEREAS, other treatment processes include elements which continue to remain active even after arriving at the Miami-Dade County ("County") wastewater treatment facilities and would not be permitted by the County due to the disruptive impact of these elements on treatment facilities operations; and

WHEREAS, the proposed system will be installed in Wastewater Collection Basin Service Areas 11-A, 6 and 7; and

WHEREAS, the City Commission finds it in the best interest of the City and its residents to authorize the Interim City Manager to implement a pilot program to eliminate Fats, Oil, and Grease (FOG) in the City's sanitary sewer system.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

SECTION 2. The City Commission of the City of Opa-Locka, Florida, hereby authorizes the Interim City Manager to implement a pilot program to eliminate Fats, Oil, and Grease (FOG) in the City's sanitary sewer system.

SECTION 3. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager, following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

SECTION 4. This Resolution shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:
Commissioner Bass _____
Commissioner Kelley _____
Commissioner Williams _____
Vice Mayor Ervin _____
Mayor Taylor _____

DocuSign Envelope ID: 9E0F11E8-402C-4D45-94ED-1ACE95C1BF9D

City of Opa-Locka
Agenda Cover Memo

Department Director:	Airia Austin			**Department Director Signature:**	DocuSigned by:		
City Manager:	Darvin E. Williams			**CM Signature:**	DEW		
Commission Meeting Date:	01.10.2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**
				X			
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		X
Funding Source: *Account#* **:86-5356308** Enterprise Fund	*(Enter Fund & Dept)*		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	X
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:Piggyback**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
		X	**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐					
Sponsor Name	City Manager		**Department:** Public Works Sewer Division		City Manager			

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the City Manager to implement a pilot program to eliminate Fats, Oil, and Grease (FOG) in the City's sanitary sewer system.

Staff Summary:

Issue / Recommendation: Fats, Oil and Grease (FOG) account for 95% of the sewer stoppages and pump station failures. This pilot program aims to mitigate this concern at a cost of $48,000.00 for a six (6) month period. In-Pipe Technology is a sole source provider that utilizes the science of dosing with microbes to eliminate FOG.

Their microbe dosing system is a self-contained unit that can be deployed in a sewer manhole. Other systems require weekly or monthly direct dispensing of liquid chemicals which are corrosive and present a safety/health hazard for City employees. Additionally, microbes used in the treatment process reach end-of-life in the wet well of the pump station, since they cannot survive in an environment devoid of oxygen, which is the case in a force main. However, other treatment processes include elements which continue to remain active even after arriving at the County wastewater treatment facilities and would not be permitted by the County due to the disruptive impact of these elements on treatment facilities operations.

This system will be installed in Wastewater Collection Basin Service Areas 11-A, 6 and 7.

Background: The City is having increased problems with FOG in the sanitary sewer collection system. This problem is more prevalent in areas with multi-family dwellings where more often fats, oils, and grease are disposed of improperly directly into the drains, which then coagulates and forms a solid lining in the sewer mains and laterals that results in clogs.

Financial Impact: This procurement will be funded through the Sewer Division Other Contracted Services Account – 35-535340 which currently has an available balance of $131,351.

Proposed Action:

Staff recommends the City Commission approve the implementation of this pilot program with In-Pipe Technology for $48,000.00

Attachment:

1. Agenda
2. Sale Quotation
3. Sole Source Letter

IN-PIPE TECHNOLOGY Because Efficiency Counts

PROPOSAL TO:

City of Opa-locka

Fats, Oil, and Grease (FOG) Control Trial

Proposal No. 2023-WA101

October 26, 2023

IN-PIPE TECHNOLOGY Because Efficiency Counts

October 26, 2023

Mr. Airia Austin
Public Works & Utilities Director
City of Opa-locka
780 Fisherman Street
Opa-locka, FL 33054

Re: IN-PIPE Technology – Opa-locka
Proposal No. 2023-WA101

Dear Mr. Austin,

On behalf of IN-PIPE Technology (IPT) we are pleased to submit our proposal to the City of Opa-locka for your consideration of our biologically-based service for the elimination of buildups of Fats, Oils & Grease (FOG) in the collection system.

We are grateful for the opportunity to present this proposal and work with the City to prove out our solution.

Should you have any questions, or if I can be of further assistance, please do not hesitate to call.

Sincerely,

Douglas G. Fagans
Chief Commercial Officer
630-509-2488 ext.227

IN-PIPE TECHNOLOGY Because Efficiency Counts

IPTC COLLECTION SYSTEM TREATMENT

Introduction

Thank you allowing IN-PIPE Technology (IPT) the opportunity to present this proposal for our microbiological treatment to improve wastewater collections system operations. Please review this proposal in detail, if you have any questions, please do not hesitate to contact us.

The IPT Technology Solution

Summary

IPT introduces a proprietary blend of specialized facultative and aerobic bacteria near point sources of Fats, Oils, and Grease, to provide effective pre-treatment wherever issues arise. The continuous addition of microbes is achieved by installing dosing units at strategic locations in the collection system. These battery-powered, self-contained units are installed underground in manholes and/or in lift stations at strategic locations. The engineering dynamics of modifying the collection system microbiology, the partial digestion of the wastewater constituents, the control of FOG, and improved microbiological population entering the WWTP with the wastewater, all contribute to maintaining the life of existing infrastructure.

In-Pipe Application Strategy

The Microbial Dosing Units (MDUs) are battery powered, with each one containing a 30-60 day supply of IPT bacteria, a metering pump and electronics to dose continuously. The panels are inspected for functionality and reloaded periodically with microbes by the local IPT service team.

Fats, Oil, and Grease (FOG) Control

In-Pipe removes accumulations of Fats, Oils and Grease (FOG) in the collection system with a specific blend of bacteria that is highly effective at breaking down and removing FOG. Left untreated, grease buildup in the sewer pipes eventually leads to blockages and sanitary sewer overflows (SSO), leading to costly manual cleanouts and maintenance.

IPT will break down and metabolize FOG in the sewer piping and lift stations. Areas in the collection system that have historic grease problems are treated with In-Pipe's heavy grease bacteria (HGB), a blend of bacteria that specialize in producing the enzymes necessary to rapidly break down the lipolytic bonds that bind together the constituent components of FOG.

In-Pipe treatment will break down and metabolize FOG in the sewer piping and lift stations, reducing accumulations in the collection system by up to 95% thereby eliminating the need for manual cleanouts due to FOG. Once the FOG accumulations are removed, they will never return with continued In- Pipe service.

Additionally, FOG build up in lift stations contributes to the formation of odors and noxious gases and promotes the growth of filamentous bacteria that slough off and degrade the performance of the wastewater treatment plant process. As an example of our efficacy, In-Pipe has previously documented success in breaking down and eliminating FOG at the City of Sarasota. See the photo documentation results below from a typical lift station before and after In-Pipe Treatment.

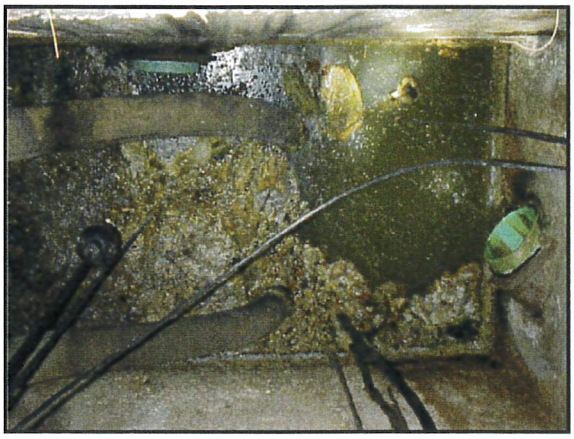


Figure 1 – Initial Conditions



Figure 2 – Conditions with IPT Treatment

Sanitary Sewer Overflow (SSO) Reduction

Using In-Pipe service may reduce SSO at locations where FOG occlusions are restricting flow during high flow events. For example, in late 2008 IPT began treating the collection system for the City of Sarasota. During that year, the City recorded nearly 69,000 gallons of spilled sewage due to SSOs. In 2009, this volume decreased to 11,300 gallons and in 2010, it was only 7,700 gallons. SSOs decreased by 90% in 3 years. We have been proud to serve the City of Sarasota ever since.



Gravity Sewer 5/22/2009



Gravity Sewer 1/22/2010 Downtown

A television survey of a gravity sewer line in the City of Sarasota showed a dramatic reduction in FOG buildup inside the gravity sewer after IPT treatment. The pictures above are screenshots from the two television surveys performed 7 months apart on an area treated with IPT bacteria. Though the process of biologically removing FOG takes time, the survey clearly shows the significant reduction in FOG accumulation as a result of the IPT bacteria. The removal of blockages like the one shown above throughout the City prevented tens of thousands of gallons of untreated raw wastewater spills.

Scope of Services

IPT Dosing Locations

IN-PIPE Technology customizes a collection system treatment solution for each customer. Strategic dosing locations are chosen at the outset of the project by our engineering staff. During installation and subsequent microbe reloads, each dosing location is evaluated and its state is documented (i.e., accumulation of FOG, excessive odor, etc.). Taking this information into consideration, the engineering team at IPT can make adjustments to the microbe blend at any location during the project in order to more effectively treat the specific situation at that location. Additionally, we provide reports highlighting potential problems that may be observed during our field service so that together, IPT and the City may be proactive in addressing potential problems before they occur.

The continuous introduction of In-Pipe microbes is achieved through numerous Microbial Dosing Units (MDUs) located below ground, inside manholes and pump stations throughout the collection system. The MDU is approximately 12-inches x 12-inches x 6-inches. They require no external power and no above-ground liquid storage. The MDUs remain the property of IPT for the duration of the project. Each MDU contains a 30-60 day supply of In-Pipe microbial solution and the panels are inspected for functionality and reloaded at 30 day intervals by the In-Pipe service team. Further, with In-Pipe service neither the MDU nor any other aspect of In-Pipe treatment requires any additional staffing or operating expense from the City.

Implementation Schedule

Upon acceptance of our proposal, IN-PIPE will implement the program as follows:

1. Receipt & Delivery of Product. We will deliver and install any required addiditional equipment: hardware, materials, and microbes on a date agreed by the City.

2. Regular service, maintenance, and review of the MDUs and locations to make sure the program progresses as expected. Each monthly supply will arrive within one week of the next service date. IPT will supply the City with a Service Reload Report for each site visit.

Packaging and Product Safety

The safety data sheet (SDS) for the IPT microbe blend is attached. IPT manufactures the microbes. The bacteria are safe to handle and are non-pathogenic. The bacteria will not harm the wastewater treatment plant, the sewer cleaning equipment or plant, animal or marine life. The product is shipped in two-liter bottles for installation into the MDUs.

Summary of Scope



- The supply, and installation of Microbial Dosing Units. **In the basins servicing Lift Stations 11A, 6 and 7.** These units remain the property of IPT
- A monthly service of MDUs, including repair and parts replacement as required, as well as the supply of Bacteria required for continuous 24/7/365 dosing.
- Monthly reports documenting the condition of the collection system treated and the impacts observed at agreed upon locations.
- 6 Months of continued bio-augmentation service to the City with monthly service intervals.
- $8,000 per month

IN-PIPE TECHNOLOGY Because Efficiency Counts

Purchasing Quote

Proposal Number:	2023-WA101
Date:	October 26, 2023
Reference:	Opa-locka FOG
Availability:	6-8 Weeks ARO
Delivery:	Included
Validity:	Proposal valid for 90 Days

To:
City of Opa-locka
780 Fisherman Street
Opa-locka, FL 33054
Attn: Airia Austin
Email: aaustin@opalockafl.gov
Phone: (305) 953-2828

From:
IN-PIPE Technology
725 N. Central
Wood Dale, IL 60191
Doug Fagans
Email: dfagans@in-pipe.com
Phone: 630.509.2488

Item	Qty.	Item Code #	Description	Price
1	6	IPT- T1	Monthly Service	$8,000/mo
			Total Trial Cost	$48,000

IN-PIPE TECHNOLOGY Because Efficiency Counts

Purchasing Quote

Proposal Number:	2023-WA101
Date:	October 26, 2023
Reference:	Opa-locka FOG
Availability:	6-8 Weeks ARO
Delivery:	Included
Validity:	Proposal valid for 30 Days

Terms

Refer to attached IPT standard Terms and Conditions.

Thank you for your consideration. We look forward to reviewing the proposal with you.

OFFERED BY:

IN-PIPE TECHNOLOGY, LLC

Douglas G. Fagans
Chief Commercial Officer

ACCEPTED BY:
City of Opa-locka

Signature: _____

Name & Title: _____

Date: _____

Purchase Order No: _____

Key Personnel



BRYAN WEBER
Chief Executive Officer

Bryan Weber is a growth-oriented, diverse, global business executive with particular strengths in division general management (P&L), marketing and strategic planning. He has broad experience encompassing consumer products, management consulting, business services and engineered industrial products. He has led teams of 350 people, and managed businesses exceeding $100 million in size, including the water business at Underwriters Laboratories. He received his B.S. in chemical engineering from Purdue University and an M.B.A., with distinction in marketing and finance from Northwestern University's Kellogg Graduate School of Management.



DOUG FAGANS
Chief Commercial Officer

Doug Fagans is a global business strategy and sales executive with deep experience driving sustainable growth through operational excellence. His varied background includes senior leadership roles in Client Solutions/Implementation, Sales, Marketing, Strategy, Channel Management, Product Management, and Consulting. Doug received his BA in International Affairs from the George Washington University, and his MBA in Marketing, Strategy, and International Business from Northwestern University's Kellogg Graduate School of Management.



MARIE KROGER, PhD
Chief Science Officer

Dr. Marie Kroeger is an experienced scientist leading interdisciplinary research teams focused on understanding how the microbiome affects ecosystem functions and leveraging that knowledge to engineer ecosystems for functions like decreased greenhouse gas emissions. Marie's diverse research background integrated microbial physiology, multi-omics', and both synthetic and natural microbial communities to address fundamental and applied research objectives. Marie earned her BS in Biology from Northeastern Illinois University and PhD in Microbiology from the University of Massachusetts Amherst. Prior to joining In-Pipe, Marie earned a Chick-Keller Postdoctoral Fellowship at Los Alamos National Laboratory before becoming a staff scientist in the Bioscience Division.



XIAOLONG WANG, PhD
Head of Engineering

Dr. Xiaolong Wang has been studying and working in wastewater treatment and collection system modeling for 8 years, with projects aiming to improve plant treatment efficiency, reduce plant operation costs, and change wastewater characteristics in sewer system. Xiaolong received his BS in Environmental Engineering from Jilin Jianzhu University, and earned a PhD in Environmental Engineering from the Illinois Institute of Technology. He is a Licensed Professional Engineer (P.E) in the State of Wisconsin. He is active in WEF and IWEA member, joining both organizations in 2015. He received an Academic Excellence Award from the Central States Water Environmental Association in 2018. He currently serves on the IWEA the Plant Operations Committee and the Award Committee.

IN-PIPE TECHNOLOGY Because Efficiency Counts

IN-PIPE Technology References

City of Sarasota, FL
1750 12th Street
Sarasota, FL 34236
Customers Serviced: 55,500 (6 MGD)
Dates of Service: August, 2006 to Present
Mr. Carlos Marin
Phone: (941)955- 2200 X 6278
Email: carlos.marin@sarasotagov.com

City of Lakeland
1825 Glendale Street
Lakeland, FL 33803
Customers Serviced: 97,400 (35 MGD)
Dates of Service: February, 2001 to Present
Mr. Rick Ruede, Collections Manager
Phone: (863)34-6571
Email: richard.ruede@lakelandgov.net

City of Oklahoma City
200 N. Walker
Oklahoma City, OK 73102
Customers Services: 150,000 (50 MGD)
Dates of Service: June 2014 to Present
Mr. Kenny Davis, Collections Manager
Phone: (405)990-2661
Email: kenny.davis@okc.gov

City of Crown Point
1321 Merrillville Rd.
Crown Point, IN 46307
Customers Serviced: 21,000 (5.2 MGD)
Dates Service: August, 2007 to Present
Mr. Chris Previs, Wastewater Treatment Plant Manager
Phone: (219)662-3255
Email: cprevis@crownpoint.in.gov

City of Texas City
3901 Bay Street
Texas City, TX 77590
Customers Services: 45,000 (13 MGD)
Dates of Service: November 2012 to Present
Mr. Calvin Bremer, Wastewater Treatment Superintendent
Phone: (409)643-5961
Email: cbremer@texas-city-tx.org

IN-PIPE TECHNOLOGY Because Efficiency Counts

City of McHenry
333 S. Green St.
McHenry, IL 60050
Customers Serviced: 23,450 (4.8 MGD)
Dates of Service: October 2013 to Present
Mr. Russel Ruzicka, Wastewater Treatment Superintendent
Phone: (815)578-1303
Email: rruzicka@ci.mchenry.il.us

In-Pipe Technology, LLC
725 N. Central Avenue
Wood Dale, IL, USA 60191
Telephone: 630-509-2488

BIO-25©

MSDS Revision Date: 06/27/2017

SAFETY DATA SHEET (SDS)

SECTION 1 - IDENTIFICATION

Product identifier : **BIO-25©**

Product Code(s) : BIO-25©

Product Use : Bioaugmentation treatment for wastewater.

Chemical Family : Mixture of: Water; Alcohol; Bacterial additive; Acrylic polymer.

Supplier's name and address:

In-Pipe Technology, LLC
725 N. Central Avenue
Wood Dale, IL, USA
60191

Manufacturer's name and address:

Refer to Supplier

Information Telephone # : (630) 509-2488

24 Hr. Emergency Tel # : (847) 343-0880

SECTION 2 - HAZARDS IDENTIFICATION

Classification : WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:
Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200). Hazardous classification:
Acute Health Hazard;
Chronic Health Hazard.

Emergency Overview : Milky, white liquid. Musty odor.
Caution! Ingestion will likely cause irritation to the throat and stomach. May cause respiratory irritation. High concentrations may cause nausea, headache, dizziness and incoordination. May cause eye irritation. Prolonged or repeated skin contact may cause drying and irritation. Prolonged overexposure may cause liver and kidney effects.



POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

Inhalation : May cause irritation to the nose, throat and upper respiratory tract. In extremely high concentrations, may also cause nausea, vomiting, dizziness, drowsiness and other symptoms of central nervous system depression.

Skin : Direct skin contact may result in little or no irritation. May be absorbed through the skin.

Eyes : May cause moderate eye irritation.

Ingestion : May cause irritation of mouth, throat, and stomach. May cause nausea, vomiting, and diarrhea.

Effects of long-term (chronic) exposure
: Prolonged or repeated skin contact may cause irritation, defatting or dermatitis (rash). Prolonged overexposure may cause liver and kidney effects.

Carcinogenic status : See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects
: See ECOLOGICAL INFORMATION, Section 12.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt.%
Isopropyl alcohol	67-63-0	7.00 - 13.00

SECTION 4 - FIRST AID MEASURES

Inhalation : Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. When symptoms persist or in all cases of doubt seek medical advice.

Skin contact : Remove contaminated clothing. Wash with water and soap as a precaution. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

Eye contact : Immediately flush eye(s) with plenty of water. When symptoms persist or in all cases of doubt seek medical advice.

Ingestion : Do not induce vomiting. Have victim rinse mouth with water, then give one to two glasses of water to drink. Get medical attention. Never give anything by mouth to an unconscious person.

Notes for Physician : Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability

: Not flammable under normal conditions of use. Vapors are heavier than air and collect in confined and low-lying areas. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.1200)

: Combustible Liquid Class III B.

Oxidizing properties : None known.

Explosion data: Sensitivity to mechanical impact / static discharge

: Not expected to be sensitive to mechanical impact or static discharge.

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special fire-fighting procedures/equipment

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products

: Carbon oxides; unburned alcohols; Styrene; Acrylic monomer.

NFPA Rating

0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

: *Health:* 1 *Flammability:* 1 *Instability:* 0 *Special Hazards:* None.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : No special environmental precautions required. Avoid contamination of natural waterways.

Spill response/cleanup : Ventilate area of release. Remove all sources of ignition. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Spill area: Wash with water and soap as a precaution. Flush into sewer with plenty of water. Avoid contamination of natural waterways. Notify the appropriate authorities as required.

Prohibited materials : None known.

Special spill response procedures

: If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.

SECTION 7 - HANDLING AND STORAGE

Safe Handling procedures : Ensure adequate ventilation. Wear suitable protective equipment during handling. Avoid breathing vapors. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and flame. Avoid contact with incompatible materials. Wash thoroughly after handling.

Storage requirements : Store in a cool, dry, well-ventilated area. Keep away from incompatibles. Inspect periodically for damage or leaks. Protect from damage.

Incompatible materials : Strong oxidizing agents; Acids; Bases; Alkali metals; Bactericidal compounds.

Special packaging materials : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

Ingredients	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Isopropyl alcohol	200 ppm	400 ppm	400 ppm	N/Av

Ventilation and engineering measures

: Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection : If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised.

Skin protection : Gloves impervious to the material are recommended. Advice should be sought from glove suppliers. Wear as appropriate: PVC; Neoprene; Nitrile rubber.

Eye / face protection : Safety goggles or glasses as appropriate for the job.

Other protective equipment : Depending on conditions of use, an impervious apron should be worn. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

: Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid.

Appearance : Milky, white liquid.

Odor : Musty odor.

Odor threshold : N/Av

pH : 6.8 - 7.2

Boiling point : 100°C (212°F)

Specific gravity : 1.0

Melting/Freezing point : N/Av

Coefficient of water/oil distribution : N/Av

Vapor pressure (mmHg @ 20° C / 68° F) : N/Av

Vapor density (Air = 1) : Heavier than air.

Solubility in water : completely soluble

Evaporation rate (n-Butyl acetate = 1) : same as water

Volatile organic Compounds (VOC's) : N/Av

Volatiles (% by weight) : N/Av

Flash point : > 100°C (212°F)

Flash point Method : Tag closed cup

Auto-ignition temperature : N/Av

Lower flammable limit (% by vol.) : N/Av

Upper flammable limit (% by vol.) : N/Av

Flame Projection Length : N/Ap

Flashback observed : N/Ap

Viscosity : N/Av

Absolute pressure of container : N/Ap

SECTION 10: STABILITY AND REACTIVITIY

Stability and reactivity : Stable under the recommended storage and handling conditions prescribed.

Hazardous polymerization : Hazardous polymerization does not occur.

Conditions to avoid : Avoid heat and open flame. Do not use in areas without adequate ventilation.

Materials to Avoid and Incompatibility : Strong oxidizing agents; Acids; Bases; Alkali metals; Bactericidal compounds.

Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

Target organs : Eyes, skin, respiratory system and digestive system. Liver; Kidneys.

Routes of exposure : *Inhalation:* YES *Skin Absorption:* YES *Skin & Eyes:* YES *Ingestion:* YES

Toxicological data : There is no available data for the product itself, only for the ingredients. See Section 2.

Ingredients	LC_{50}(4hr) inh, rat	LD_{50} (Oral, rat)	LD_{50} (Rabbit, dermal)
Isopropyl alcohol	17,000 ppm	4720 mg/kg	12,890 mg/kg

Carcinogenic status : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects : None known.

Teratogenicity : This product contains Isopropanol. Isopropanol is no longer considered a developmental toxin. Teratogenic / fetotoxic effects were observed in animals, however the effects were observed in the presence of maternal toxicity or at concentrations where maternal toxicity is expected to occur.

Mutagenicity : None known.

Epidemiology : Not available.

Sensitization to material : Not expected to be a skin or respiratory sensitizer.

Synergistic materials : None known.

Irritancy : Mild skin irritant. Moderate eye irritant.

other important hazards : CNS depression may result from extreme exposures.

Conditions aggravated by overexposure : Pre-existing skin, eye and respiratory disorders.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity : See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

Ingredients	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Isopropyl alcohol	67-63-0	9640 mg/L (Fathead minnow)	N/Av	N/Ap

Ingredients	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Isopropyl alcohol	67-63-0	1400 mg/L (Water flea)	30 mg/L (Water flea)	N/Ap

Ingredients	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Isopropyl alcohol	67-63-0	N/Av	N/Av	N/Ap

Mobility : The product itself has not been tested.

Persistence : The product itself has not been tested. Contains Isopropyl alcohol. Isopropyl alcohol is considered to be readily biodegradable.

Bioaccumulation potential : The product itself has not been tested. Contains Isopropyl alcohol. The bioaccumulation potential of Isopropyl alcohol is expected to be low. The bioconcentration factor (BCF) of Isopropyl alcohol is calculated at 1.0, based on a Log Kow value of 0.05.

Other Adverse Environmental effects

: None known or reported by the manufacturer.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle waste according to recommendations in Section 7.

Methods of Disposal : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14: TRANPORT INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	none	Not regulated.	Not regulated	none	
TDG Additional information	None.				
49CFR/DOT	None	Not regulated.	Not regulated	none	

In-Pipe Technology, LLC
725 N. Central Avenue
Wood Dale, IL, USA 60191
Telephone: 630-509-2488

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MSDS Revision Date: 06/27/2017

49CFR/DOT Additional information	None.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de minimus Concentration
Isopropyl alcohol	67-63-0	Yes	N/Ap	N/Av	Yes	0.1%

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

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US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

Ingredients	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Isopropyl alcohol	67-63-0	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

International Information:

Components listed below are present on the following International Inventory list:

Ingredients	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
Isopropyl alcohol	67-63-0	200-661-7	Present	Present	(2)-207	KE-29363	Present	HSR001180

SECTION 16 - OTHER INFORMATION

HMIS Rating : *- Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

Health: *2 *Flammability:* 1 *Reactivity:* 0

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CA: California
CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CNS: Central Nervous System
DOT: Department of Transportation
HMIS: Hazardous Materials Identification System
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
Inh: Inhalation
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
MSHA: Mine Safety and Health Administration
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
TSCA: Toxic Substance Control Act
WHMIS: Workplace Hazardous Materials Identification System

References : 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2013.
2. International Agency for Research on Cancer Monographs, searched 2013.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2013 (Chempendium, HSDB, RTECs).
4. Material Safety Data Sheet from manufacturer.
5. US EPA Title III List of Lists - July 2011 version.
6. California Proposition 65 List - May 24, 2013 version.

Prepared for: In-Pipe Technology, LLC 725 N. Central Avenue Wood Dale, IL USA 60191 Telephone: (630) 509-2488 Please direct all enquiries to In-Pipe Technology.	
Prepared by: ICC The Compliance Center Inc. http://www.thecompliancecenter.com	

DISCLAIMER OF LIABILITY

In-Pipe Technology, LLC
725 N. Central Avenue
Wood Dale, IL, USA 60191
Telephone: 630-509-2488

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MSDS Revision Date: 06/10/2013

This Material Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by / obtained from In-Pipe Technology Company, Inc. and CCOHS' Web Information Service. The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and In-Pipe Technology Company, Inc. expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and In-Pipe Technology Company, Inc.

Preparation Date : 02/27/2010

MSDS Revision Date : 06/27/2017

Revision No. : 3

Revision Information : MSDS sections updated:
1. IDENTIFICATION
2. HAZARDS IDENTIFICATION

END OF DOCUMENT

IN-PIPE TECHNOLOGY Because Efficiency Counts

IN-PIPE TECHNOLOGY COMPANY, INC.
EXHIBIT A
STANDARD TERMS AND CONDITIONS

1.0 ACCEPTANCE Sale of any products or services (hereafter, the "Products") by In-Pipe Technology Company, Inc. ("Seller") to Purchaser shall be subject to the terms and conditions of sale contained herein. No change in or addition to these terms shall be binding upon Seller unless specifically accepted in writing by Seller. Seller objects in advance to any additional or different terms proposed in Purchaser's order.

2.0 PRICING Prices shall be Seller's price in effect at time of shipment unless otherwise specified in Seller's written quotation. Quotations automatically expire 90 calendar days from quotation date and may be canceled at any time by written notice.

3.0 FORCE MAJEURE LIMITATION Seller shall not be liable for any loss, damage or expense resulting from delay or failure in the performance of Seller's obligations hereunder if such delay or failure is due to acts of God or the public enemy, strikes, labor troubles, fire, explosions, riots, war, governmental orders or restrictions, shortages of materials or labor, delay in transportation, theft, accidents or any other cause which is beyond Seller's reasonable control. Upon the occurrence of any such event preventing the Seller from performing all of its then outstanding contracts, the Seller shall then be entitled to perform such of its contracts as it may select and shall incur no liability to the Purchaser by reason of performing contracts other than this agreement. The Seller's total liability for damages related to the performance of or failure to perform this agreement shall be limited to the amount of the contract price. IN NO EVENT SHALL THE SELLER BE LIABLE FOR LOSS OF PROFITS BY REASON OF PLANT SHUTDOWN, NON-OPERATION OR INCREASE IN EXPENSE OF OPERATION OF OTHER EQUIPMENT OR FACILITIES OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

4.0 DELIVERY Shipping dates are estimates only and are based on Seller's projected production schedules and commitments by suppliers. DELAY IN SHIPMENT OR VARIANCE FROM SHIPPING SCHEDULE SHALL NOT BE CAUSE FOR CANCELLATION OR CLAIM FOR DAMAGE. Receipt by the Purchaser of any Products or services shall constitute acceptance of delivery and waiver of any claims due to delay.

5.0 WARRANTY Supplier warrants that its labor, materials, and equipment supplied hereunder shall be free from defect and shall conform to the standards of care in effect in its industry at the time of performance of such labor, materials, and equipment for the time this contract is in effect.

5.1 Supplier's obligation is limited to repair or replacement F.O.B. Purchaser's facility when examination of any such equipment shall disclose them to Supplier's reasonable satisfaction to have been defective and Purchaser shall have promptly notified Supplier of the discovery of any such defect. Supplier will not be responsible for; work done, material or equipment furnished or repairs or alterations made by others.

5.2 For any breach hereunder, Supplier shall be liable to Purchaser for all damages (limited as stated in "Liability of Supplier") as shall be applicable under the law, except as otherwise provided in this agreement. Purchaser shall be entitled to pursue all rights and remedies available by law, except as otherwise provided in this agreement. In any event, Supplier's total liability towards Purchaser for alleged faulty performance or nonperformance under this contract shall be limited to the total contract price. THE ABOVE WARRANTY IS INLIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED.

6.0 LIABILITY OF SUPPLIER shall not be liable for any bodily injury, death, or injury to or destruction of tangible property except, as the same may have been caused by the negligence or willful misconduct of Supplier. In no event shall Supplier be liable for any delays or special, indirect, incidental or consequential damages. Purchaser agrees that the total limit of Supplier's liability (whether based on negligence, warranty, strict liability or otherwise) hereunder, shall not exceed the aggregate amount due Supplier for services rendered under this contract. All claims, including claims for negligence or any other cause whatsoever, shall be deemed waived unless made in writing and received by Supplier within one (1) year after Supplier's completion of work hereunder.

7.0 PAYMENTS Terms of payment are net 30 days. The maximum legal rate (or 18%) of interest and all costs of collection (including attorney's fees) shall be charged on past due accounts. All orders are subject to the continuing approval of Seller's credit department. If Purchaser is in default in any payment, Seller may declare all payments for work completed

immediately due and payable, stop all further work until payments are brought current and/or require advance payment for future shipments. If the financial condition of the Purchaser at any time does not in the judgment of Seller justify continuance of production or shipment on the terms of payment set forth herein, Seller may require full or partial payment in advance or shall be entitled to cancel any order then outstanding and shall receive reimbursement for its reasonable and proper cancellation charges. In the event of bankruptcy or insolvency of the Purchaser or in the event any proceeding is brought against the Purchaser, voluntarily or involuntarily under the bankruptcy or any insolvency laws, Seller shall be entitled to cancel any order then outstanding at any time during the period allowed for filing claims against the estate and shall receive reimbursement for its reasonable and proper cancellation charges.

8.0 DRAWINGS If drawings are furnished with this proposal, they are submitted only to show the general style, arrangement and approximate dimensions of the equipment and services offered. No work is to be based upon proposal drawings. It is the Purchaser's responsibility to verify that the data given on certified drawings is suitable for applicable installation conditions. Any changes made after the order is released for manufacture will be subject to extra charges.

9.0 TITLE/RISK OF LOSS/DEFAULT Unless otherwise specified by Seller, delivery will be made F.O.B. point of shipment to Purchaser. Title to right of possession and ownership of equipment covered herein shall remain the property of the Seller. The Purchaser agrees to do all acts necessary to perfect and maintain such right and title in the Seller. In case of failure or refusal to make payments when due, then and in any such event the whole of the unpaid portion of the purchase price shall, at Seller's option, become immediately due and payable and in case of such default on Purchaser's part, Seller shall thereupon have the right to enter the premises upon which such property shall be installed and take possession of and remove the same without legal process. This equipment shall retain its character as personal property regardless of its mode of attachment. Risk of loss or damage shall pass to Purchaser on delivery to carrier.

10.0 TAXES In addition to any price specified herein, Purchaser shall pay the gross amount of any present, or future sales, use, excess, value added or other similar tax applicable to the price, sale or delivery of any Products or their use by Seller or Purchaser, or Purchaser shall furnish Seller with a tax exempt certificate acceptable to the taxing authorities.

11.0 CANCELLATION Any order placed with Seller may be cancelled by the Purchaser only upon payment of reasonable cancellation charges, which shall take into account expenses already incurred and commitments made by the Seller.

12.0 PROPRIETARY IPT BULK MICROBE CULTURE The Client agrees that it will use prudent attempts to ensure that no analysis will be allowed on the IPT bulk microbe culture reagents without prior written authorization by In-Pipe Technology Company, LLC. In-Pipe Technology methodology is protected by US Patents (#5,578,211 and 5,788,841 and Canada Patent # 2,272,689) owned by the company.

13.0 DISPUTE RESOLUTION Any dispute or controversy arising out of, under, or in connection with, or in relation to, this Agreement and/or any amendments thereto, or the breach thereof, which is not resolved informally by prior mutual agreement of the Purchaser and Seller, shall be submitted to non-binding arbitration, unless otherwise waived and/or modified in writing by the Parties. The cost of such arbitration shall be paid by the Purchaser and Seller equally; however, the prevailing party in the arbitration shall be entitled to reimbursement of its attorney's fees and other costs and expenses incurred in connection therewith.

13.1 If a dispute arises which is not resolved by arbitration pursuant to the above, and either party reasonably retains counsel for the purpose of enforcing any provision of this Agreement, including without limitation the institution of any action or proceeding to enforce any provision of this Agreement, or to recover damages if otherwise available hereunder, or to obtain injunctive or other relief by reason of any alleged breach of any provision of this Agreement, or for a declaration based on a demonstrated necessity of such Party's rights or obligations under this Agreement, or for any other judicial or equitable remedy, then if the matter is settled by judicial or quasi-judicial determination, the prevailing Party shall be entitled, in addition to such other relief as may be granted, to be reimbursed by the losing Party for all costs and expenses incurred including, without limitation, all attorneys' fees and costs for services rendered to the prevailing Party and any attorneys' fees and costs incurred in enforcing any judgment or order entered. The prevailing Party shall be as determined by the court in the initial or any subsequent proceeding.

14.0 GENERAL The terms and conditions hereof cancel and supersede all previous understandings or agreements relating to the Products covered hereunder, written or oral, between Seller and Purchaser and contain the entire understanding of the parties hereto. Terms and conditions in the attached proposal supersede terms and conditions in this document No waiver, alteration, deletion or modification of or addition to any of the provisions hereof shall be binding unless in writing and signed by a duly authorized representative of the Seller. If any term, provision or condition contained herein shall, to any

expert, be invalid or unenforceable, the remainder of the terms, provisions and conditions hereof other than those which are invalid or unenforceable, shall not be affected thereby and each term, provision and condition of this order shall be valid and enforceable to the fullest extent permitted by law. This order and all rights and obligations of the parties shall be construed and interpreted under and pursuant to the laws of the State of Illinois.

IN-PIPE TECHNOLOGY Because Efficiency Counts

October 23, 2023

Mr. Airia Austin
Public Works Director
City of Opa-locka
780 Fisherman Street
Opa-locka, FL 33054

Dear Mr. Austin,

This letter is to confirm that the proprietary collection system microbial dosing method used by In-Pipe Technology is a sole source service, provided exclusively by In-Pipe Technology. We are not aware of any other company that provides comprehensive, turn-key microbial dosing of the entire collection system in substantially the same manner. This service must be purchased directly by the City from In-Pipe Technology. There are no agents or dealers authorized to represent this service in the State of Florida

We are not aware of any similar or like service available to the City of Opa-locka that would serve the same purpose or function.

If you desire additional information, don't hesitate to contact me at (630) 509-2488 at any time or visit our website at www.in-pipe.com. Thank you for your interest in our products and services.

Sincerely,

Douglas G. Fagans
Chief Commercial Officer
630-509-2488

Sponsored by: Interim City Manager

RESOLUTION NO. XX-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, DIRECTING THE INTERIM CITY MANAGER TO REQUEST THAT MIAMI-DADE COUNTY CONDUCT A FEASIBILITY STUDY TO INSTALL A PEDESTRIAN CROSSWALK ON FISHERMAN STREET IN FRONT OF CITY HALL, WITHIN THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Interim City Manager of the City of Opa-Locka, Florida ("City") recommends that the City Commission authorize that a request be made to the Miami-Dade County Traffic Section to perform all necessary traffic surveys to determine the need for and feasibility of installing a Pedestrian Crosswalk on Fisherman Street in front of City Hall; and

WHEREAS, the Interim City Manager has determined that if the traffic study confirms the need for a pedestrian crosswalk on Fisherman Street, the various cost options for installation of a crosswalk will be included as part of the traffic study report; and

WHEREAS, the City Commission of the City of Opa-Locka finds that it is in the best interests of the City and its residents to approve a request to Miami-Dade County to conduct a feasibility study for the possible installation of a pedestrian crosswalk on Fisherman Street in front of City Hall, within the City.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka hereby authorizes that a request be made to the appropriate department of Miami-Dade County for a feasibility study related to the installation of a pedestrian crosswalk on Fisherman Street in front of the City of Opa-Locka City Hall.

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the Interim City Manager, following review by the City Attorney and without need of

public hearing, by filing a corrected copy of same with the City.

Section 4. EFFECTIVE DATE.
This Resolution shall take effect immediately upon adoption and is subject to the approval of the Governor or his designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

DocuSign Envelope ID: 5F780726-94CB-4A5D-B01E-46005B59B32E

City of Opa-locka
Agenda Cover Memo

Department Director:	Airia Austin			**Department Director Signature:**	DocuSigned by:	
City Manager:	Darvin Williams			**CM Signature:**	C46C07C1E8DE492...	
Commission Meeting Date:	01.10.2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**
				X		
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**	**2nd Reading**
		X	**Public Hearing:** *(Enter X in box)*		**Yes** / **No**	**Yes** / **No**
						X / X
Funding Source: *Account#:*	*(Enter Fund & Dept.)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*		**Yes**	**No**
						X
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**			
		X				
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*	
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐			
Sponsor Name	City Manager		**Department:**		City Manager	

Short Title:

Feasibility Study for Pedestrian Crosswalk

Staff Summary:

A resolution of the City Commission of the City of Opa-locka, Florida, directing the Interim City Manager to request Miami-Dade County conduct a Feasibility study to install a pedestrian crosswalk on Fisherman Street in front of City Hall as determined by the traffic study.

DocuSign Envelope ID: 5F780726-94CB-4A5D-B01E-46005B59B32E

Financial Impact – There is no cost associated with the County conducting a traffic study. If the study confirms the need for a crosswalk on Fisherman Street, the cost of various options for installation of a crosswalk will be included as part of the traffic study report.

Proposed Action:

Staff recommends the Interim City Manager be authorized to submit a request to the Miami-Dade County Traffic Section to perform all necessary traffic surveys to determine the need for and feasibility of installing a Pedestrian Crosswalk on Fisherman Street in front of City Hall.

Attachment:

1. Agenda
2. Photo

Sponsored by: Interim City Manager

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A SOLE SOURCE CONTRACT WITH HYDRA SERVICE, INC., IN AN AMOUNT NOT TO EXCEED FORTY-ONE THOUSAND, TWELVE DOLLARS ($41,012.00), FOR THE DIRECT PURCHASE OF TWO SUBMERSIBLE REPLACEMENT PUMPS FOR PUMP STATION NO. 14., WITHIN THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, two new pumps are required for Pump Station #14 within the City of Opa-Locka ("City") and the Interim City Manager recommends the purchase of two ABS pumps from Hydra Service, Inc. in the amount of Forty-One Thousand, Twelve Dollars ($41,012.00); and

WHEREAS, Pump Station #14 was designed for ABS pumps; and

WHEREAS, two pumps were installed in 2012 and their expectancy was ten (10) years has expired with one pump having failed and the other routinely overheating; and

WHEREAS, Pump Station #14 is operating with a lower horsepower backup pump to avoid the Pump Station being placed in moratorium due to insufficient capacity; and

WHEREAS, to ensure the availability of reliable sufficient capacity, two new pumps must be procured; and

WHEREAS, because the Pump Station was designed for ABS pumps only, the new pumps must be from the same manufacturer to avoid costly pump station modifications; and

WHEREAS, Hydra Service, Inc. is the only authorized ABS pump dealer in the State, necessitating these pumps be procured through this vendor as a sole source; and

WHEREAS, Hydra Service, Inc., located in Debary, Florida, is a sole source distributor contracted for Selzer wastewater (formerly ABS) products, which territory includes the entire State of Florida; and

WHEREAS, the price for these two pumps is Forty One Thousand, Twelve Dollars ($41,012.00); and

WHEREAS, the Interim City Manager recommends the purchase of two XFP150G-CB1.8PE185/43PH 230V 17B0RPM 40' cable submersible pumps from Hydra Service, Inc. for Forty- One Thousand, Twelve Dollars ($41,012.00); and

WHEREAS, Pursuant to Section 2-318(1)(b) and 2-318(1)(c) of the City's Purchasing Ordinance 20-07, "b. A contract may be awarded without competition when the city manager makes a written determination, after conducting a good faith review of available sources, that there is only one (1) source for the required supplies or contractual service. The city manager shall conduct negotiations as appropriate to price, delivery and terms. A record of sole source procurement shall be maintained as a public record and shall list each contractors name, amount and type of each contract, and the identification number of each contract file; c. All sole source procurements, where the cost of the supplies or contractual services exceeds twenty- five thousand dollars ($25, 000. 00), shall be authorized by the city commission"; and

WHEREAS, the City Commission finds that it is in the best interest of the City and its residents to purchase two Submersible Replacement Pumps for Pump Station No. 14. within the City from sole source supplier Hydra Service, Inc.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka, hereby authorizes the Interim City Manager to enter into a sole source contract with Hydra Service, Inc., in an amount not to exceed Forty-One Thousand, Twelve Dollars ($41,012.00), for the direct purchase of two Submersible Replacement Pumps for Pump Station No. 14, within the City and in a form approved by the City Attorney.

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City Clerk.

Section 4. EFFECTIVE DATE.
This Resolution shall be effective immediately upon adoption hereof and approval by the

Governor of the State of Florida or Governor's designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-Locka
Agenda Cover Memo

Department Director:	Airia Austin			**Department Director Signature:**	DocuSigned by:			
City Manager:	Darvin E. Williams			**CM Signature:**	C46C07C1E8DE492...			
Commission Meeting Date:	01.10.2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		X
Funding Source: *Account#:* 35-535640	*(Enter Fund & Dept)*		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:Piggyback**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ■ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐					
Sponsor Name	City Manager		**Department:** Public Works Sewer Division		City Manager			

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the City Manager to purchase Submersible Replacement Pumps for Pump Station No. 14. from the sole source vendor Hydra Service, Inc.

Staff Summary:

Issue / Recommendation: Two new pumps are required for Pump Station #14. Staff recommends the purchase of two ABS pumps from Hydra Service, Inc. for $41,012.00

Background: Pump Station #14 was designed for ABS pumps. Two pumps were installed in 2012 and their expected life of ten (10) years has expired, with one pump having failed and the other routinely overheating.

Current Activity: Pump Station #14 is operating with a lower horsepower backup pump to avoid the Pump Station being placed in moratorium due to insufficient capacity. To ensure the availability of reliable sufficient

DocuSign Envelope ID: 65DB7E26-7721-4BC6-B0A0-479BF72DE86B

capacity, two new pumps must be purchase. Since the Pump Station was designed for ABS pumps, the new pumps must be from the same manufacturer to avoid costly pump station modification. Hydra Services, Inc. is the only authorized ABS pump dealer in the State, necessitating these pumps be purchase through this vendor. The price for these two pumps is $41,012.

Financial Impact: This purchase will be funded through the Sewer Division Machinery and Equipment Account – 35-535640. This account currently has an available balance of $131,351. However, on the agenda for this meeting there is a separate project for $25,000 for an odor control system, leaving $106,351 available for these pumps.

Proposed Action:

Staff recommends the City Commission approve the purchase of two XFP150G-CB1.8PE185/43PH 230V 1780RPM 40' cable submersible pumps from Hydra Service, Inc., for $41,012.00

Attachment:

1. Agenda
2. Sale Quotation
3. Sole Source Letter

Hydra Service, Inc.

SPECIALIST IN FLUID MOVEMENT

SULZER abs

15612

250 Springview Commerce Drive
Debary Florida 32713
Phone: 407 330 3456
Phone: 800 323 1731
Fax: 407 330 3404

Sales Representative
Contact Information
Cell Phone: 954-240-9359
Fax:

TO: City of Opa Locka

ATTN: Owen Carney

PHONE

FAX:

EMAIL: ocarney@opalockafl.gov

FROM: Scott Carney
EMAIL: scarney@hydraservice.net
DATE: September 23, 2022

QUOTE: 220923-1PR

REF: LS 14

2 **XFP 150G-CB1.8-PE185/4 25HP 3PH 230V 1780RPM 49'Cable** **$20,506.00**

FIVE YEAR PRORATED WARRANTY

CURRENT DELIVERY IS 6-8 WEEKS

TOTAL PRICE, F.O.B. JOB, FREIGHT ALLOWED $41,012.00 PLUS ANY FEDERAL, STATE OR LOCAL TAXES WHICH MAY APPLY. TERMS ARE NET 30 DAYS. PRICES ARE FIRM 30 DAYS HYDRA SERVICE STANDARD TERMS AND CONDITIONS APPLY. PAYMENT TERMS ARE NET 30 DAYS.

ACCEPTED DATE _____ Review Date: _____

NAME OF PURCHASER

REVIEWED BY HYDRA SERVICE PUMP REP.

SULZER

Sulzer Pumps Solutions Inc.
140 Pond View Drive
Meriden, CT 06450
Phone (203) 238 2700
Fax (203) 514 4364
www.sulzer.com

28 June 2022

To: Owen Carney, City of Opa Locka, Florida

The purpose of this letter is to confirm that Hydra Service Inc., located in DeBary, Florida, is the sole Distributor contracted for Sulzer wastewater (formerly ABS) products, including pumps, mixers, blowers and aerators, for the Municipal Wastewater Collection and Treatment market. Hydra Service's territory includes the entire state of Florida.

Nationally, we utilize a network of independent distributors/service centers to serve the Municipal, Industrial, Building Trades and Dewatering market segments in specific territories. The authorized distributor for Sulzer products in these segments/territories has the expertise, knowledge, training and access to the latest product developments and upgrades, along with genuine OEM parts. Hydra Service staff is trained in the latest methods in care and start-up of our equipment and has the ability to execute warranty claims.

Please do not hesitate to contact me if I can provide any additional information.

Sincerely,

Tim Laskowski

Tim Laskowski
Regional Sales Manager
Sulzer Pump Solutions
(972) 654 - 0553
Timothy.laskowski@sulzer.com

SULZER CONFIDENTIAL

Sponsored by: Interim City Manager

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A SOLE SOURCE CONTRACT WITH HYDRA SERVICE, INC., IN AN AMOUNT NOT TO EXCEED TWENTY-EIGHT THOUSAND, SIX HUNDRED THIRTY DOLLARS ($28,630.00), FOR THE DIRECT PURCHASE OF A SUBMERSIBLE REPLACEMENT PUMP FOR PUMP STATION NO. 11-A, WITHIN THE CITY; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City's Lift Station No. 11-A located near Bahman Avenue and Sesame Street has experienced mechanical failure to one of the two submersible pumps in the station. The Interim City Manager recommends purchasing a new unit; and

WHEREAS, the pump that failed at Lift Station 11-A, was installed on March 20, 2012, making it nearly 12- years old. There is currently a back-up pump taking its place; and

WHEREAS, the repair of this pump is estimated to cost in the range of $10,000 to $13,000; and

WHEREAS, industry standards indicate that the life expectancy of a pump is between ten and twenty years. Rather than repair this pump, the Interim City Manager has determined this to be an appropriate opportunity to replace it with a grinder pump which grinds up material entering the wastewater system before it has the opportunity to clog up the system and create back-ups; and

WHEREAS, the Pump Station was designed for ABS pumps, the new pumps must be from the same manufacturer to avoid costly pump station modification; and

WHEREAS, Hydra Services, Inc. is the only authorized ABS pump dealer in the State, necessitating these pumps be procured through this vendor; and

WHEREAS, the Interim City Manager recommends the City Commission authorize the purchase a submersible pump for lift station No. 11-A from the sole source vendor Hydra Service, Inc. in the amount Twenty Eight Thousand, Six Hundred Thirty Dollars ($28,630.00); and

WHEREAS, Hydra Service, Inc., located in DeBary, Florida is a sole source distributor contracted for Selzer wastewater (formerly ABS) products, which territory includes the entire State of Florida; and

WHEREAS, Pursuant to Section 2-318(1)(b) and 2-318(1)(c) of the City's Purchasing Ordinance 20-07, "b. A contract may be awarded without competition when the city manager makes a written determination, after conducting a good faith review of available sources, that there is only one (1) source for the required supplies or contractual service. The city manager shall conduct negotiations as appropriate to price, delivery and terms. A record of sole source procurement shall be maintained as a public record and shall list each contractors name, amount and type of each contract, and the identification number of each contract file; c. All sole source procurements, where the cost of the supplies or contractual services exceeds twenty- five thousand dollars ($25, 000. 00), shall be authorized by the city commission"; and

WHEREAS, the City Commission finds that it is in the best interests of the City and its residents to purchase a Submersible Replacement Pump for Lift Station No. 11-A within the City from sole source supplier Hydra Service, Inc.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka, hereby authorizes the Interim City Manager to enter into a sole source contract with Hydra Service, Inc., in an amount not to exceed Twenty Eight Thousand, Six Hundred Thirty Dollars ($28,630.00), for the direct purchase of Submersible Replacement Pumps for Pump Station No. 11-A, within the City and in a contact form to be approved by the City Attorney.

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City Clerk.

Section 4. EFFECTIVE DATE.
This Resolution shall be effective immediately upon adoption hereof and approval by the Governor of the State of Florida or Governor's designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

John Taylor, Mayor

ATTEST:

Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-Locka
Agenda Cover Memo

Department Director:	Airia Austin			**Department Director Signature:**				
City Manager:	Darvin E. Williams			**CM Signature:**				
Commission Meeting Date:	*01/10/2024*		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		**X**
Funding Source: *Account#*: **35-535640** Enterprise Fund	*(Enter Fund & Dept)*		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#: Piggyback**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
		X						
Sponsor Name	City Manager		**Department:** Public Works Sewer Division		City Manager			

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the Inter City Manager to purchase a submersible pump for lift station No. 11-A from the sole source vendor Hydra Service, Inc.

Staff Summary:

Issue / Recommendation: The City's Lift Station No. 11-A located near Bahman Avenue and Sesame Street has experienced mechanical failure to one of the two submersible pumps in the station. Staff recommends purchasing a new unit.

Background: The pump that failed at Lift Station 11-A, was installed March 20, 2012, making it nearly 12-years old. There is currently a back-up pump taking its place. The repair of this pump is estimated to cost in the range of $10,000 to $13,000. Industry standards indicate that the life expectancy of a pump is between ten and twenty years. Rather than repair this pump, staff believes this is an appropriate opportunity to replace it with a grinder pump which grinds up material entering the wastewater system before it has the opportunity to clog up the system and create back-ups.

Since the Pump Station was designed for ABS pumps, the new pumps must be from the same manufacturer to avoid costly pump station modification. Hydra Services, Inc. is the only authorized ABS pump dealer in the State, necessitating these pumps be purchased through this vendor.

Financial Impact: This purchase will be funded through the Sewer Division Machinery and Equipment Account –35-535640.

Account	Description	Available	Project	Remaining Balance
35-535640	Sewer Machinery & Equip,	$49,985	$28,630	$21,355

Proposed Action:

Staff recommends the City Commission authorizes the City Manager to purchase a submersible pump for lift station No. 11-A from the sole source vendor Hydra Service, Inc. in the amount $28, 630.00.

Attachment:

Agenda
Sale Quotation
Sole Source Letter

Hydra Service, Inc.

SPECIALIST IN FLUID MOVEMENT

We know how water works

250 Springview Commerce Drive
Debary Florida 32713
Phone: 407 330 3456
Phone: 800 323 1731
Fax: 407 330 3404

Sales Representative
Contact Information
Cell Phone: 407-790-9751

TO: **City Of Opa Locka**

ATTN: **Owen Carney**

PHONE **786-877-4015**

EMAIL: ocarney@opalockafl.gov

FROM: **Scott Carney**
EMAIL: scarney@hydraservice.net
DATE: **October 23, 2023**

QUOTE: **231023-1SC**

REF: **PS11A**
Alternate to repair SQ30083

1	SULZER MODEL XFP206-CB2.360-PE350/6, 8" DISCHARGE, 47HP, 460V, 60Hz, 3-PH, W/ 49FT OF CABLES DUTY POINT: 1800 GPM @ 60FT TDH PN: AXF59T3331H1117
1	5 year, 100% warranty.

TOTAL PRICE, F.O.B. JOB, FREIGHT INCLUDED **$28,630.00** PLUS ANY FEDERAL, STATE OR LOCAL TAXES WHICH MAY APPLY. TERMS ARE NET **30** DAYS. PRICES ARE FIRM 30 DAYS

"HYDRA SERVICE INC TERMS & CONDITIONS APPLY" PAYMENT TERMS NET 30 DAYS.
ESTIMATED DELIVERY: **12-13** WEEKS AFTER RECEIPT IN OUR OFFICE OF COMPLETE APPROVED SUBMITTAL DATA AND SIGNED PROPOSAL.
THESE TERMS ARE INDEPENDENT OF, AND ARE NOT CONTINGENT UPON THE TIME OR MANNER IN WHICH PURCHASER MAY RECEIVE PAYMENT FROM OTHERS.
0 DAY OF FACTORY START-UP IS INCLUDED AND REQUIRED FOR WARRANTY. PAYMENT FOR MATERIALS WILL BE REQUIRED BEFORE THE AUTHORIZED START-UP IS CONDUCTED.

ACCEPTED DATE _____ Review Date: 10/23/2023

_____ *Scott Carney*

NAME OF PURCHASER REVIEWED BY HYDRA SERVICE PUMP REP.

SULZER

Sulzer Pumps Solutions Inc.
140 Pond View Drive
Meriden, CT 06450
Phone (203) 238 2700
Fax (203) 514 4364
www.sulzer.com

28 June 2022

To: Owen Carney, City of Opa Locka, Florida

The purpose of this letter is to confirm that Hydra Service Inc., located in DeBary, Florida, is the sole Distributor contracted for Sulzer wastewater (formerly ABS) products, including pumps, mixers, blowers and aerators, for the Municipal Wastewater Collection and Treatment market. Hydra Service's territory includes the entire state of Florida.

Nationally, we utilize a network of independent distributors/service centers to serve the Municipal, Industrial, Building Trades and Dewatering market segments in specific territories. The authorized distributor for Sulzer products in these segments/territories has the expertise, knowledge, training and access to the latest product developments and upgrades, along with genuine OEM parts. Hydra Service staff is trained in the latest methods in care and start-up of our equipment and has the ability to execute warranty claims.

Please do not hesitate to contact me if I can provide any additional information.

Sincerely,

Tim Laskowski

Tim Laskowski
Regional Sales Manager
Sulzer Pump Solutions
(972) 654 - 0553
Timothy.laskowski@sulzer.com

SULZER CONFIDENTIAL

Sponsored by: Interim City Manager

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO A SOLE SOURCE CONTRACT WITH IN-PIPE TECHNOLOGY COMPANY, INC., IN AN AMOUNT NOT TO EXCEED TWENTY-FIVE THOUSAND DOLLARS ($25,000.00), FOR THE DIRECT PURCHASE OF AN AOP-16 LIFT STATION ODOR CONTROL UNIT FOR PUMP STATION NO. 11-A, WITHIN THE CITY PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Pump Station 11-A is located at the southeast comer of Sherbondy Village Park, within the City; and

WHEREAS, it is the source of noxious odors that adversely affects the park patrons; and

WHEREAS, to resolve this concern, staff recommends the purchase and installation of a Lift Station Odor Control Unit for Pump Station 11-A within the City at a cost of Twenty-Five Thousand Dollars ($25,000.00); and

WHEREAS, In-Pipe Technology Company, Inc. is the sole source provider that completely treats noxious gases (including hydrogen sulfide). Other comparable systems in the industry require monthly to quarterly replacement of costly treatment media while the recommended unit only requires maintenance every 14 months (10,000 Hours); and

WHEREAS, the price for the odor control unit is Twenty-Five Thousand Dollars ($25,000.00); and

WHEREAS, the Interim City Manager recommends the purchase of an AOP-16 Lift Station Odor Control Unit from In-Pipe Technology Company, Inc. for Twenty-Five Thousand Dollars ($25,000.00); and

WHEREAS, pursuant to Section 2-318(1)(b) and 2-318(1)(c) of the City's Purchasing Ordinance 20-07, "b. A contract may be awarded without competition when the city manager makes a written determination, after conducting a good faith review of available sources, that there is only one (1) source for the required supplies or contractual service. The city manager shall conduct negotiations as appropriate to price, delivery and terms. A record of sole source procurement shall be maintained as a public record and shall list each contractors name, amount and type of each contract, and the identification number of each contract file; c. All sole source procurements, where the cost of the

supplies or contractual services exceeds twenty- five thousand dollars ($25, 000. 00), shall be authorized by the city commission"; and

WHEREAS, the City Commission finds that it is in the best interests of the City and its residents to purchase an AOP-16 Lift Station Odor Control Unit for Pump Station No. 11-A within the City from sole source supplier, In-Pipe Technology Company, Inc.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka, hereby authorizes the Interim City Manager to enter into a sole source contract with In-Pipe Technology Company, Inc., in an amount not to exceed Twenty-Five Thousand Dollars ($25,000.00), for the direct purchase of an AOP-16 Lift Station Odor Control Unit for Pump Station No. 11-A, within the City and in a form to be approved by the City Attorney.

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City Clerk.

Section 4. EFFECTIVE DATE.
This Resolution shall be effective immediately upon adoption hereof and approval by the Governor of the State of Florida or Governor's designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____

Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-Locka
Agenda Cover Memo

Department Director:	Airia Austin		**Department Director Signature:**	DocuSigned by:	
City Manager:	Darvin E. Williams		**CM Signature:**	D. E. Wil... C46C07C1E8DE492...	
Commission Meeting Date:	01.10.2024	**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**
			X		
Fiscal Impact: *(Enter X in box)*	**Yes** / **No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**	**2nd Reading**
	X /	**Public Hearing:** *(Enter X in box)*		**Yes** / **No**	**Yes** / **No**
				/ X	/ X
Funding Source: *Account#:* 35-535640	*(Enter Fund & Dept)*	**Advertising Requirement:** *(Enter X in box)*		**Yes**	**No**
					X
Contract/P.O. Required: *(Enter X in box)*	**Yes** / **No**	**RFP/RFQ/Bid#:Piggyback**			
	X /				
Strategic Plan Related *(Enter X in box)*	**Yes** / **No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*	
	X /	**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐			
Sponsor Name	City Manager	**Department:** Public Works Sewer Division		City Manager	

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the City Manager to purchase an odor control unit for Pump Station 11-A.

Staff Summary:

Issue / Recommendation: Pump Station 11-A is located at the southeast corner of Sherbondy Village Park. It is the source of noxious odors that adversely affect the park patrons. To resolve this concern, staff recommends the purchase and installation of a Lift Station Odor Control Unit at a cost of $25,000.00. In-Pipe Technology is the sole source provider that completely treats noxious gases (including hydrogen sulfide). Other comparable systems in the industry require monthly to quarterly replacement of costly treatment media while the recommended unit only requires maintenance every 14 months (10,000 Hours).

Financial Impact: This purchase will be funded through the Sewer Division Machinery and Equipment Account – 35-535640, which has $120,000 available, including $25,000 budgeted for this purpose.

Proposed Action:

Staff recommends the City Commission approve the purchase of a, **AOP-16 Lift Station Odor Control unit** at a cost of $25,000.00.

Attachment:

1. Agenda
2. Sale Quotation
3. Sole Source Letter

PROPOSAL TO:

City of Opa-locka

Advanced Oxidation Process Lift Station Odor Control Unit (AOP-16) – LS 11A

Date: October 23, 2023

Proposal Number 2023-WA99

IN-PIPE TECHNOLOGY Because Efficiency Counts

Lift Station Odor Control

In-Pipe Technology (IPT) is pleased to present this proposal for the capital purchase of our AOP-16 Lift Station Odor Control unit. The unit uses photohydroionization (PHI) to produce safe, environmentally friendly hydroxide ions that are very efficient at oxidizing hydrogen sulfide (H_2S) to reduce odor problems from lift station wet wells. Via the venturi effect created by an airflow eductor, negative pressure is created in the headspace of the wet well to slowly draw hazardous gases from the wet well and oxidize them inside of the unit itself.

Please see the attached equipment cut sheet and specification for details on the unit's benefits and operation. In general, an average of 80-95% reduction in H_2S gases can be achieved. For stricter control of H_2S emissions requiring either 100% removal or less than 5 parts per million (ppm), small amounts of activated carbon (less than 1-2 lbs total) can be added to the exhaust of the AOP-16.

This proposal will outline the costs of our unit if purchased.

The AOP-16 is meant for continuous operation. Maintenance of the AOP-16 should be performed every 10,000 hours or every 14 months. In general, maintenance involves replacing the (6) PHI (UV) light cells, and ensuring other components are operating as intended (and replaced as needed). If the unit is left installed and not operational, there is a significant risk of damage and corrosion to the internal PHI mechanisms from exposure to H_2S. Please see below for a schedule of maintenance options available.





Summary of Scope

- The supply of one (1) AOP-16 Lift Station Odor Control Unit at lift station 11A, including all required piping.

- Installation of the unit to the lift station exhaust valve. The exhaust valve must be detached of any other equipment prior to installation.
- Electrical hookup to 110v MUST be performed by the City or a county-approved licensed contractor.
- Sufficient space on a concrete pad must be provided by the City

Available Maintenance Services

Maintenance can be performed by City personnel (maintenance manual to be provided upon installation). Alternately IPT can perform the following services (prices are per unit):

- **Full Service - $500/month**. This includes a full replacement of all parts (as identified on our parts list) every 10,000 hours, monthly inspection on the unit and the monthly replacement of any optional additional carbon as required.
- **Full Service Plus $1,500/month**. We will continuously monitor via H2S Acrulog (which remains our property) and fully replace the parts (as identified on our parts list) every 10,000 hours. Includes a monthly inspection on the unit, monthly replacement of carbon filters (if selected), and monthly reporting of H2S levels at the exhaust of the unit.
- **Monthly Inspection and Carbon Filter Replacement - $300/month**. We will inspect the unit monthly and notify the customer if/when the unit requires maintenance – we also will replace the carbon (if using) monthly.
- **One Time Service (recommended every 10,000 hours/14 months of operation) - $4,000**. We will replace all 6 PHI cells and any other parts as necessary (provided the unit has not corroded due to H2S gasses allowed in due to the unit being inoperative) and ensure the unit is ready for an additional 10,000 hours of operation.
- **Replacement Activated Carbon and filter bags- $500/50lb box**.
- **Complete replacement of internal PHI unit - $7,500** (e.g. if unit is left installed inoperative and is corroded due to exposure to H2S gasses for a prolonged period of time)

IN-PIPE TECHNOLOGY Because Efficiency Counts

Purchasing Quote

Proposal Number:	2023-WA99
Date:	October 23, 2023
Reference:	Opa-locka
Availability:	8-10 weeks ARO
Delivery:	Included
Validity:	Proposal valid for 30 Days

To:
City of Opa-Locka
12950 Lejeune Road (NW 42nd Avenue)
Opa-locka, FL 33054

Phone: (305) 953-2868
E-mail: aaustin@opalockafl.gov
Attn: Airia Austin
Public Works Director

From:
In-Pipe Technology® Company, Inc.
725 N. Central Ave.
Wood Dale, IL 60191

Phone: (630) 509-2488
E-mail: dfagans@in-pipe.com
Attn: Douglas Fagans
Chief Commercial Officer

Item	Qty	Item Code #	Description	Price
1	1	IPT-AOP-16	Purchase of IPT(OH^-) Hydroxyl Odor Control Equipment for Lift Stations	$20,000
2	1	IPT-AOP-INST	Delivery and Installation	$5,000
		Total Cost		$25,000

IN-PIPE TECHNOLOGY Because Efficiency Counts

Purchasing Quote	Proposal Number:	2023-WA99
	Date:	October, 2023
	Reference:	Opa-locka
	Availability:	8-10 Weeks ARO
	Delivery:	Included
	Validity:	Proposal valid for 30 Days

Terms

Refer to attached IPT standard Terms and Conditions.

Thank you for your consideration. We look forward to reviewing the proposal with you.

OFFERED BY:

IN-PIPE TECHNOLOGY, LLC

Douglas G. Fagans
Chief Commercial Officer

ACCEPTED BY:
City of Opa-locka

Signature: _____

Name & Title: _____

Date: _____

Purchase Order No: _____

IN-PIPE TECHNOLOGY Because Efficiency Counts

IN-PIPE TECHNOLOGY COMPANY, INC.
EXHIBIT A
STANDARD TERMS AND CONDITIONS

1.0 ACCEPTANCE Sale of any products or services (hereafter, the "Products") by In-Pipe Technology Company, Inc. ("Seller") to Purchaser shall be subject to the terms and conditions of sale contained herein. No change in or addition to these terms shall be binding upon Seller unless specifically accepted in writing by Seller. Seller objects in advance to any additional or different terms proposed in Purchaser's order.

2.0 PRICING Prices shall be Seller's price in effect at time of shipment unless otherwise specified in Seller's written quotation. Quotations automatically expire 90 calendar days from quotation date and may be canceled at any time by written notice.

3.0 FORCE MAJEURE LIMITATION Seller shall not be liable for any loss, damage or expense resulting from delay or failure in the performance of Seller's obligations hereunder if such delay or failure is due to acts of God or the public enemy, strikes, labor troubles, fire, explosions, riots, war, governmental orders or restrictions, shortages of materials or labor, delay in transportation, theft, accidents or any other cause which is beyond Seller's reasonable control. Upon the occurrence of any such event preventing the Seller from performing all of its then outstanding contracts, the Seller shall then be entitled to perform such of its contracts as it may select and shall incur no liability to the Purchaser by reason of performing contracts other than this agreement. The Seller's total liability for damages related to the performance of or failure to perform this agreement shall be limited to the amount of the contract price. IN NO EVENT SHALL THE SELLER BE LIABLE FOR LOSS OF PROFITS BY REASON OF PLANT SHUTDOWN, NON-OPERATION OR INCREASE IN EXPENSE OF OPERATION OF OTHER EQUIPMENT OR FACILITIES OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

4.0 DELIVERY Shipping dates are estimates only and are based on Seller's projected production schedules and commitments by suppliers. DELAY IN SHIPMENT OR VARIANCE FROM SHIPPING SCHEDULE SHALL NOT BE CAUSE FOR CANCELLATION OR CLAIM FOR DAMAGE. Receipt by the Purchaser of any Products or services shall constitute acceptance of delivery and waiver of any claims due to delay.

5.0 WARRANTY Supplier warrants that its labor, materials, and equipment supplied hereunder shall be free from defect and shall conform to the standards of care in effect in its industry at the time of performance of such labor, materials, and equipment for the time this contract is in effect.

5.1 Supplier's obligation is limited to repair or replacement F.O.B. Purchaser's facility when examination of any such equipment shall disclose them to Supplier's reasonable satisfaction to have been defective and Purchaser shall have promptly notified Supplier of the discovery of any such defect. Supplier will not be responsible for; work done, material or equipment furnished or repairs or alterations made by others.

5.2 For any breach hereunder, Supplier shall be liable to Purchaser for all damages (limited as stated in "Liability of Supplier") as shall be applicable under the law, except as otherwise provided in this agreement. Purchaser shall be entitled to pursue all rights and remedies available by law, except as otherwise provided in this agreement. In any event, Supplier's total liability towards Purchaser for alleged faulty performance or nonperformance under this contract shall be limited to the total contract price. THE ABOVE WARRANTY IS INLIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED.

6.0 LIABILITY OF SUPPLIER shall not be liable for any bodily injury, death, or injury to or destruction of tangible property except, as the same may have been caused by the negligence or willful misconduct of Supplier. In no event shall Supplier be liable for any delays or special, indirect, incidental or consequential damages. Purchaser agrees that the total limit of Supplier's liability (whether based on negligence, warranty, strict liability or otherwise) hereunder, shall not exceed the aggregate amount due Supplier for services rendered under this contract. All claims, including claims for negligence or any other cause whatsoever, shall be deemed waived unless made in writing and received by Supplier within one (1) year after Supplier's completion of work hereunder.

7.0 PAYMENTS Terms of payment are net 30 days. The maximum legal rate (or 18%) of interest and all costs of collection (including attorney's fees) shall be charged on past due accounts. All orders are subject to the continuing approval of Seller's credit department. If Purchaser is in default in any payment, Seller may declare all payments for work completed

immediately due and payable, stop all further work until payments are brought current and/or require advance payment for future shipments. If the financial condition of the Purchaser at any time does not in the judgment of Seller justify continuance of production or shipment on the terms of payment set forth herein, Seller may require full or partial payment in advance or shall be entitled to cancel any order then outstanding and shall receive reimbursement for its reasonable and proper cancellation charges. In the event of bankruptcy or insolvency of the Purchaser or in the event any proceeding is brought against the Purchaser, voluntarily or involuntarily under the bankruptcy or any insolvency laws, Seller shall be entitled to cancel any order then outstanding at any time during the period allowed for filing claims against the estate and shall receive reimbursement for its reasonable and proper cancellation charges.

8.0 DRAWINGS If drawings are furnished with this proposal, they are submitted only to show the general style, arrangement and approximate dimensions of the equipment and services offered. No work is to be based upon proposal drawings. It is the Purchaser's responsibility to verify that the data given on certified drawings is suitable for applicable installation conditions. Any changes made after the order is released for manufacture will be subject to extra charges.

9.0 TITLE/RISK OF LOSS/DEFAULT Unless otherwise specified by Seller, delivery will be made F.O.B. point of shipment to Purchaser. Title to right of possession and ownership of equipment covered herein shall remain the property of the Seller. The Purchaser agrees to do all acts necessary to perfect and maintain such right and title in the Seller. In case of failure or refusal to make payments when due, then and in any such event the whole of the unpaid portion of the purchase price shall, at Seller's option, become immediately due and payable and in case of such default on Purchaser's part, Seller shall thereupon have the right to enter the premises upon which such property shall be installed and take possession of and remove the same without legal process. This equipment shall retain its character as personal property regardless of its mode of attachment. Risk of loss or damage shall pass to Purchaser on delivery to carrier.

10.0 TAXES In addition to any price specified herein, Purchaser shall pay the gross amount of any present, or future sales, use, excess, value added or other similar tax applicable to the price, sale or delivery of any Products or their use by Seller or Purchaser, or Purchaser shall furnish Seller with a tax exempt certificate acceptable to the taxing authorities.

11.0 CANCELLATION Any order placed with Seller may be cancelled by the Purchaser only upon payment of reasonable cancellation charges, which shall take into account expenses already incurred and commitments made by the Seller.

12.0 PROPRIETARY IPT BULK MICROBE CULTURE The Client agrees that it will use prudent attempts to ensure that no analysis will be allowed on the IPT bulk microbe culture reagents without prior written authorization by In-Pipe Technology Company, LLC. In-Pipe Technology methodology is protected by US Patents (#5,578,211 and 5,788,841 and Canada Patent # 2,272,689) owned by the company.

13.0 DISPUTE RESOLUTION Any dispute or controversy arising out of, under, or in connection with, or in relation to, this Agreement and/or any amendments thereto, or the breach thereof, which is not resolved informally by prior mutual agreement of the Purchaser and Seller, shall be submitted to non-binding arbitration, unless otherwise waived and/or modified in writing by the Parties. The cost of such arbitration shall be paid by the Purchaser and Seller equally; however, the prevailing party in the arbitration shall be entitled to reimbursement of its attorney's fees and other costs and expenses incurred in connection therewith.

13.1 If a dispute arises which is not resolved by arbitration pursuant to the above, and either party reasonably retains counsel for the purpose of enforcing any provision of this Agreement, including without limitation the institution of any action or proceeding to enforce any provision of this Agreement, or to recover damages if otherwise available hereunder, or to obtain injunctive or other relief by reason of any alleged breach of any provision of this Agreement, or for a declaration based on a demonstrated necessity of such Party's rights or obligations under this Agreement, or for any other judicial or equitable remedy, then if the matter is settled by judicial or quasi-judicial determination, the prevailing Party shall be entitled, in addition to such other relief as may be granted, to be reimbursed by the losing Party for all costs and expenses incurred including, without limitation, all attorneys' fees and costs for services rendered to the prevailing Party and any attorneys' fees and costs incurred in enforcing any judgment or order entered. The prevailing Party shall be as determined by the court in the initial or any subsequent proceeding.

14.0 GENERAL The terms and conditions hereof cancel and supersede all previous understandings or agreements relating to the Products covered hereunder, written or oral, between Seller and Purchaser and contain the entire understanding of the parties hereto. Terms and conditions in the attached proposal supersede terms and conditions in this document No waiver, alteration, deletion or modification of or addition to any of the provisions hereof shall be binding unless in writing and signed by a duly authorized representative of the Seller. If any term, provision or condition contained herein shall, to any

expert, be invalid or unenforceable, the remainder of the terms, provisions and conditions hereof other than those which are invalid or unenforceable, shall not be affected thereby and each term, provision and condition of this order shall be valid and enforceable to the fullest extent permitted by law. This order and all rights and obligations of the parties shall be construed and interpreted under and pursuant to the laws of the State of Illinois.

IN-PIPE TECHNOLOGY Because Efficiency Counts

In-Pipe Technology Odor Control Unit (IPT-AOP-16) Advanced Oxidation Process System for Wastewater



THE LOW COST IPT-AOP-16 ODOR CONTROL SYSTEM OF ADVANCED OXIDATION GAS PRODUCTION IS DESIGNED TO PROVIDE ODOR DESTRUCTION

IPT-AOP-16 Odor Control Unit produces advanced oxidation gases

High intensity UV light produces Advanced Oxidation gases (Ozone, Hydroperoxides, Super Oxide Ions, Hydroxides and Ozonide Ions)

Destroys odor molecules, bacteria, and organic pollutants

Highlights

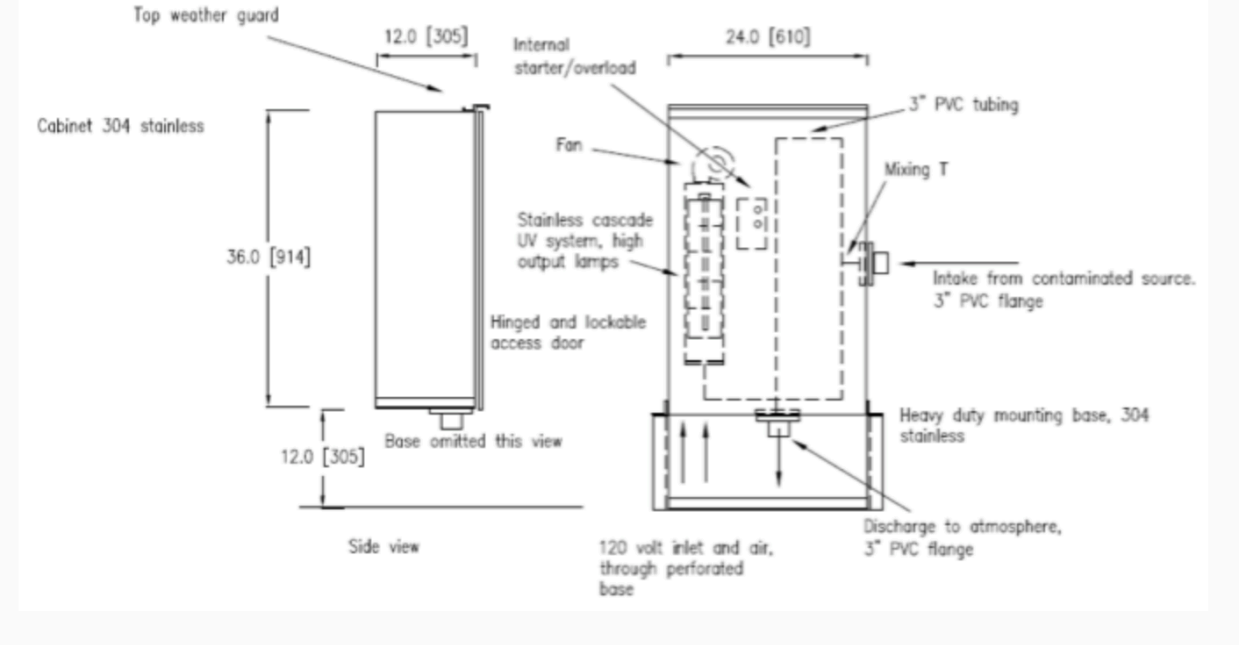
10,000 hours average cell life	All stainless steel
Plug and play, fully automatic, system	Easy to use and install, versatile and portable
No costly and complicated chemicals	Leaves no residue
Automatic Unattended Operation	Environmentally friendly
Low Maintenance	Low power consumption, 110V or 220V
Safety Service Cut Off Switch	On off indicator light
High-Capacity Blower	Eliminates odors

IN-PIPE TECHNOLOGY Because Efficiency Counts

Specification Table

Model	IPT-AOP-16
Design Criteria	One IPT-AOP-16 unit for approximate 4,000 ft^3 of foul air
Voltage	110V, 60Hz, Low:1.36 A, High: 2.17A 220V, 50/60 Hz, Low: 0.68A, High: 1.09A
Weight	Approximate 250 lbs
Material	Stainless steel
Color	Green
Dimensions	30" x 48" x 24"
Enclosure/shade for outdoor installations	Recommend a simple structure like a lean-to for shade
Inlet/Outlet	3" PVC Flange
Controls	On/off, High/low (Six cells on high setting - three cells on low setting)
Fan volume	100 CFM
Number of Phi cells	Six (6)
Phi cell	Life approx. 10000 hours
Oxidation gases	Hydro peroxides, Ozone, Super oxide ions, Ozonide ions

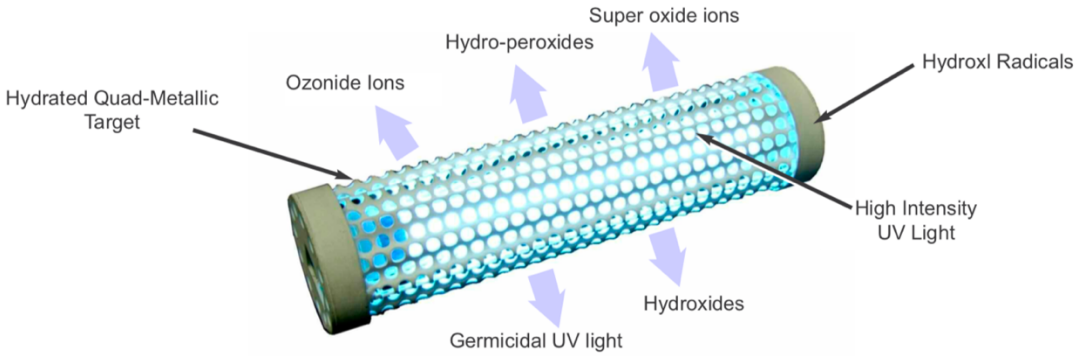
Internal Piping Schematic and Clearances



IN-PIPE TECHNOLOGY Because Efficiency Counts

Mechanism

The IPT-AOP-16 Odor Control Unit utilizes a high intensity UV light technology which when targeted on a hydrated Quad-Metallic target in a Ozone atmosphere creates Ozone, Hydroperoxides, Super Oxide Ions, Hydroxides and Ozonide Ions. The Ozone produced is a safe low concentration, produced by a targeted high intensity UV light technology. This method is far safer than the traditional ozone generators. Targeted UV ozone generators do not produce nitric oxide gas or nitric acid and they have a very high efficiency rating. The additional oxidizers provide a broader range of applications and redundant oxidation gases. All gases are very aggressive friendly gaseous oxidizers. The gaseous oxidizers produced revert back to oxygen and hydrogen after they oxidize the organics, bacteria, odor or gases.



Lab results

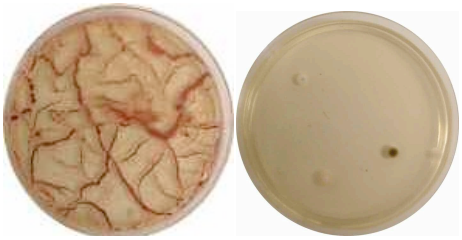


Figure 1. Before and after bacteria samples application of IPT-AOP-16 Odor Control Unit

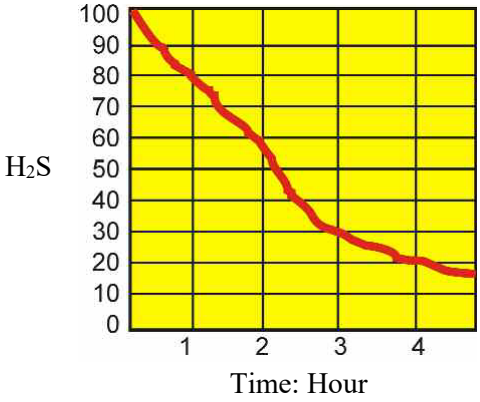


Figure 2. H_2S concentration changes plot as a function of time

IN-PIPE TECHNOLOGY Because Efficiency Counts

October 23, 2023

Mr. Airia Austin
Public Works Director
City of Opa-locka
780 Fisherman Street
Opa-locka, FL 33054

Dear Mr. Austin,

This letter is to confirm that the proprietary lift station odor control method used by In-Pipe Technology is a sole source product, provided exclusively by In-Pipe Technology. We are not aware of any other company that provides complete treatment of noxious gases (including hydrogen sulfide) exiting lift stations in substantially the same manner. This product must be purchased directly by the City from In-Pipe Technology. There are no agents or dealers authorized to resell this product in the State of Florida.

We are not aware of any similar or like product available to The City of Opa-locka would serve the same purpose or function.

If you desire additional information, don't hesitate to contact me at (630) 509-2488 at any time or visit our website at www.in-pipe.com. Thank you for your interest in our products and services.

Sincerely,

Douglas G Fagans
Chief Commercial Officer

Sponsored by: Interim City Manager

RESOLUTION NO. XX-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO AND EXECUTE A VOLUNTARY COOPERATION AND OPERATIONAL ASSISTANCE MUTUAL AID AGREEMENT BETWEEN THE CITY OF OPA-LOCKA, FLORIDA AND THE CITY OF MIAMI BEACH POLICE DEPARTMENT, ATTACHED HERETO AS EXHIBIT "A", FOR LAW ENFORCEMENT SERVICES AND RESOURCES; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Opa-Locka, Florida ("City"), and the City of Miami Beach Police Department, are authorized to enter into a Mutual Aid Agreement ("MAA") pursuant to Section 23.12, Florida Statutes, Florida Mutual Aid Act; and

WHEREAS, the Mutual Aid Agreement with the City of Miami Beach Police Department provides for requesting and rendering of mutual aid in the form of law enforcement services to adequately respond to continuing multi-jurisdictional law enforcement problems, so as to protect the public peace and safety, and preserve the lives and property of the people; and

WHEREAS, the City Commission of the City of Opa-Locka desires to authorize the Interim City Manager to enter into and execute a Mutual Aid Agreement with the City of Miami Beach Police Department, attached hereto as Exhibit "A".

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka hereby authorizes and directs the Interim City Manager to enter into and execute an operational assistance Mutual Aid Agreement ("MAA") with the City of Miami Beach Police Department, for law enforcement services and resources, attached hereto as Exhibit "A".

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the Interim City Manager, following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

Section 4. EFFECTIVE DATE.
This Resolution shall take effect immediately upon adoption and is subject to the approval of the Governor or his designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

City of Opa-locka
Agenda Cover Memo

Department Director:	Interim Police Chief Kenneth D. Ottley		**Department Director Signature:**				
City Manager:	Darvin Williams		**CM Signature:**				
Commission Meeting Date:	1.10.2024	**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
			X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**	
		X	**Public Hearing:** *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**
Funding Source: *Account#* **:**	*(Enter Fund & Dept)* Ex: None		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**	
						X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**				
		X					
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)* To enhance public safety.			
	X						
Sponsor Name	City Manager		**Department: Police Department**	City Manager			

Short Title:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT WITH THE CITY OF MIAMI BEACH POLICE DEPARTMENT, MIAMI, FLORIDA FOR THE VOLUNTARY COOPERATION AND OPERATIONAL ASSISTANCE MUTUAL AID AGREEMENT; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

Staff Summary:

The Opa-locka Police Department is seeking a Mutual Aid Agreement (MAA) between the City of Opa-locka and the City of Miami Beach Police Department. The intent of this agreement is to receive and extend mutual aid in the form of law enforcement services to adequately_respond to continuing multi-jurisdictional law

enforcement problems, so as to protect the public peace and safety, and preserve the lives and property of the people.

Financial Impact: There is no financial impact associated with this item.

Proposed Action:

Staff recommends the Commission approve this resolution and authorize the Interim City Manager to sign the Mutual Aid Agreement with the City of Miami Beach Police Department, Miami Beach, Florida.

Attachment:

Miami Beach Police Department, Miami Beach, Florida Mutual Aid Agreement

VOLUNTARY COOPERATION AND OPERATIONAL ASSISTANCE MUTUAL AID AGREEMENT BETWEEN THE CITY OF OPA-LOCKA AND THE CITY OF MIAMI BEACH, FLORIDA

This Voluntary Cooperation and Operational Assistance Mutual Aid Agreement ("Cooperation Agreement") is made as of this ____ day of _____, 2023 ("Effective Date"), by and between the CITY OF MIAMI BEACH, FLORIDA, a municipal corporation having its principal office at 1700 Convention Center Drive, Miami Beach, Florida 33139, and the CITY OF OPA-LOCKA, FLORIDA, having its principal office at 780 Fisherman Street., 4th Floor, Opa-Locka, FL 33054, state as follows:

RECITALS

WHEREAS, it is the responsibility of the governments of the City of Opa-Locka, Florida, and the City of Miami Beach, Florida, to ensure the public safety of their respective citizens by providing adequate levels of police services to address any foreseeable routine or emergency situation; and

WHEREAS, because of the existing and continuing possibility of the occurrence of law enforcement problems and other natural and man-made conditions which are, or are likely to be, beyond the control of the services, personnel, equipment, or facilities of the City of Opa-Locka Police Department or the City of Miami Beach Police Department; and

WHEREAS, in order to ensure that preparation of these law enforcement agencies will be adequate to address any and all of these conditions, to protect the public peace and safety, and to preserve the lives and property of the people of the City of Opa-Locka and the City of Miami Beach; and

WHEREAS, it is to the advantage of each law enforcement agency to receive and extend mutual aid in the form of law enforcement services and resources to adequately respond to:

(1) Continuing, multi jurisdiction law enforcement problems, so as to protect the public peace and safety, and preserve the lives and property of the people; and

(2) Intensive situations including, but not limited to, emergencies as defined under Section 252.34 of the Florida Statutes, or requests for certain law enforcement services specified herein and as defined under Section 23.1225 of the Florida Statutes; and

WHEREAS, the City of Opa-Locka and the City of Miami Beach have the voluntary cooperation and assistance authority under the Florida Mutual Aid Act, Sections 23.12-23.127 of the Florida Statutes, to enter into this Cooperation Agreement for law enforcement service which:

(1) Permits voluntary cooperation and operational assistance of a routine law enforcement nature across jurisdictional lines as allowed under Section 23.1225 of the Florida Statutes; and
(2) Provides for rendering of assistance in a law enforcement emergency as defined in Section 252.34 of the Florida Statutes.

NOW THEREFORE, BE IT KNOWN that the City of Opa-Locka, Florida and the City of Miami Beach, Florida, in consideration for mutual promises to render valuable aid in times of

necessity, do hereby agree to fully and faithfully abide by and be bound by the following terms and conditions:

SECTION I: PROVISIONS FOR VOLUNTARY COOPERATION

Each of the aforesaid law enforcement agencies hereby approve and enter into this Cooperation Agreement whereby each of the agencies may request and render law enforcement assistance to the other in dealing with any violations of Florida Statutes to include, but not necessarily be limited to, investigating sex offenses, robberies, assaults, batteries, burglaries, larcenies, gambling, motor vehicle thefts, drug violations pursuant to Chapter 893 of the Florida Statutes, backup services during patrol activities, and interagency task forces and/or joint investigations as set forth pursuant to, and under the authority of Chapter 23 of the Florida Statutes.

SECTION II: PROVISIONS FOR OPERATIONAL ASSISTANCE

The aforesaid law enforcement agencies hereby approve and enter into this Cooperation Agreement whereby each of the agencies may request and render law enforcement assistance to the other to include, but not necessarily be limited to dealing with, the following:

1. Joint multi-jurisdictional criminal investigations
2. Civil affray or disobedience, disturbances, riots, large protest demonstrations and assemblies, controversial trials, political conventions, labor disputes, and strikes.
3. Any natural disaster.
4. Incidents which require rescue operations and crowd and traffic control measures including, but not limited to, large-scale evacuations, aircraft and shipping disasters, fires, explosions, gas line leaks, radiological incidents, train wrecks and derailments, chemical or hazardous waste spills, and electrical power failures.
5. Terrorist activities including, but not limited to, acts of sabotage.
6. Escapes from, or disturbances within, prisoner processing facilities.
7. Hostage and barricaded subject situations, and aircraft piracy.
8. Control of major crime scenes, area searches, perimeter control, back-ups to emergency and in-progress calls, pursuits, and missing person calls.
9. Enemy attack.
10. Transportation of evidence requiring security.
11. Major events, e.g., sporting events, concerts, parades, fairs, festivals, and conventions.
12. Security and escort duties for dignitaries.
13. Incidents requiring utilization of specialized units; e.g., underwater recovery, aircraft, canine, motorcycle, bomb, crime scene and police information.
14. Emergency situations in which one agency cannot perform its functional objective.
15. Joint training in areas of mutual need.
16. Joint multi-jurisdictional marine interdiction operations.

The following procedures will apply in mutual aid operations:

1. Mutual aid requested or rendered will be approved by the Chief of Police, or his/her designee.
2. Specific reporting instructions for personnel rendering mutual aid will be included in the request for mutual aid. In the absence of such instructions, personnel will report to the ranking on-duty supervisor on the scene.

3. Communications instructions will be included in each request for mutual aid and each agency's communications centers will maintain radio contact with each other until the mutual aid situation has ended.
4. Incidents requiring mass processing of arrestees, transporting prisoners, and operating temporary detention facilities will be handled per established procedures of the requesting agency, or directors involved.

SECTION III: PROCEDURE FOR REQUESTING ASSISTANCE AND LIMITATIONS OF ASSISTANCE

In the event that a party to this Cooperation Agreement is in need of assistance as set forth above, the Chief of Police or his/her designee, shall notify the Chief of Police or his/her designee from whom such assistance is requested. The Chief of Police or authorized agency representative whose assistance is sought shall evaluate the situation and the agency's available resources, consult with his/her supervisors, if necessary, and will respond in a manner he/she deems appropriate.

The Chief of Police in whose jurisdiction assistance is being rendered may determine who is authorized to lend assistance in his/her jurisdiction, for how long such assistance is authorized and for what purpose such authority is granted. This authority may be granted either verbally or in writing as the particular situation dictates.

Should a law enforcement officer be in another subscribed agency's jurisdiction for matters of a routine nature, such as traveling through the area on routine business, attending a meeting or going to or from work, and a violation of Florida Statutes occurs in the presence of said party, representing his/her respective agency, **HE/SHE SHALL ONLY BE EMPOWERED TO RENDER ENFORCEMENT ASSISTANCE AND ACT IN ACCORDANCE WITH FLORIDA LAW**. Should enforcement assistance be taken, said party shall notify the agency having normal jurisdiction and upon the latter's arrival, turn the situation over to them and offer any assistance requested including but not limited to a follow-up written report documenting the event and the actions taken. This provision so prescribed in this paragraph, is not intended to grant general authority to conduct investigations, serve warrants and/or subpoenas, or to respond without request to emergencies already being addressed by the agency of normal jurisdiction, but is intended to address critical, life-threatening or public safety situations, prevent bodily injury to citizens, or secure apprehension of criminals whom the law enforcement officer may encounter and such encounter results in a breach of the peace.

The parties acknowledge that the policy of the Florida Mutual Aid Act is to provide a means to deal with disasters, emergencies, and other major law enforcement problems. This Cooperation Agreement shall not extend police powers beyond the specific additional authority granted by the Legislature in Chapter 23 of the Florida Statutes, which intent was to assure the continued functioning of law enforcement in times of emergencies or in areas where major law enforcement efforts were being thwarted by jurisdictional barriers.

SECTION IV: COMMAND AND SUPERVISORY RESPONSIBILITY

The personnel and equipment that are assigned by the assisting Agency shall be under the immediate command of a supervising officer designated by the assisting Agency. Such supervising officer shall be under the direct supervision and command of the Chief of Police or his/her designee of the agency requesting assistance.

SECTION V: CONFLICTS

Whenever an officer is rendering assistance pursuant to this Cooperation Agreement, the officer shall abide by and be subject to the rules and regulations, personnel policies, general orders, and standard operating procedures of his/her own employer. If any such rule, regulation, personnel policy, general order or standard operating procedure is contradicted, contravened or otherwise in conflict with a direct order of a superior officer of the requesting agency, then such rule, regulation, policy, general order or procedure shall control and shall supersede the direct order.

SECTION VI: HANDLING COMPLAINTS

Whenever there is cause to believe that a complaint has arisen as a result of a cooperative effort as it may pertain to this Cooperation Agreement, the Chief of Police or his/her designee of the requesting agency shall be responsible for the documentation of said complaint to ascertain at a minimum:

1. The identity of the complainant.
2. An address where the complaining party can be contacted.
3. The specific allegation.
4. The identity of the employees accused without regard as to agency affiliation.

If it is determined that the accused is an employee of the assisting agency, the above information, with all pertinent documentation gathered during the receipt and processing of the complaint, shall be forwarded without delay to the agency for administrative review. The requesting agency may conduct a review of the complaint to determine if any factual basis for the complaint exists and/or whether any of the employees of the requesting agency violated any of their agency's policies or procedures.

SECTION VII: LIABILITY

Each party engaging in any mutual cooperation and assistance, pursuant to this Cooperation Agreement, agrees to assume responsibility for the acts, omissions or conduct of such party's own employees while engaged in rendering such aid pursuant to this Cooperation Agreement, subject to the provisions of Section 768.28, Florida Statutes, where applicable.

SECTION VIII: POWERS, PRIVILEGES, IMMUNITIES AND EXPENDITURES

(a) Employees of the City of Opa-Locka and the City of Miami Beach, when actually engaging in mutual cooperation and assistance outside of their normal jurisdictional limits but inside this State, under the terms of this Cooperation Agreement, shall pursuant to the provisions of Section 23.127(1), Fla. Stat. (as amended) and this Cooperation Agreement, have the same powers, duties, rights, privileges and immunities as if the employee was performing duties inside the employee's political subdivision in which normally employed.

(b) Each party agrees to furnish necessary personnel equipment, resources and facilities and to render services to each other party to this Cooperation Agreement as set forth above; provided however, that no party shall be required to deplete unreasonably its own personnel, equipment, resources, facilities, and services in furnishing such mutual aid.

(c) A party that furnishes equipment pursuant to this Cooperation Agreement must bear the cost of loss or damage to that equipment and must pay any expense incurred in the operation and maintenance of that equipment.

(d) The agency furnishing aid pursuant to this Cooperation Agreement shall compensate its appointees/employees during the time such aid is rendered and shall defray the actual travel and maintenance expenses of its employees while they are rendering such aid, including any amounts paid or due for compensation due to personal injury or death while such employees are engaged in rendering such aid.

(e) To the extent provided by applicable law, ordinance, or rule, the privileges and immunities from liability, exemption from laws, ordinances and rules, and all pension, insurance, relief, disability, worker's compensation, salary, death and other benefits that apply to the activity of an employee of an agency when performing the employee's duties within the territorial limits of the employee's agency apply to the employee to the same degree, manner, and extent while engaged in the performance of the employee's duties extraterritorially under the provisions of this Cooperation Agreement. The provisions of this section shall apply to paid, volunteer, and reserve employees.

(f) Nothing herein shall prevent the requesting agency from requesting supplemental appropriations from the governing authority having budgeting jurisdiction to reimburse the assisting agency for any actual costs or expenses incurred by the assisting agency performing hereunder.

(g) Should the City of Miami Beach receive reimbursement for expenditures from a third party for a mutual aid event covered by this Cooperation Agreement, the City of Opa-Locka shall be eligible to receive an equitable reimbursement share for any actual costs or expenses incurred that are directly attributable to the event, provided such costs and expenses are authorized by the third party for reimbursement purposes.

(h) Should the City of Opa-Locka receive reimbursement for expenditures from a third party for a mutual aid event covered by this Cooperation Agreement, the City of Miami Beach shall be eligible to receive an equitable reimbursement share for any actual costs or expenses incurred that are directly attributable to the event, provided such costs and expenses are authorized by the third party for reimbursement purposes.

(i) The parties acknowledge that the City of Miami Beach and the City of Opa-Locka are authorized to pursue property seized pursuant to the Florida Contraband Forfeiture Act. Each party shall have exclusive authority to initiate forfeiture proceedings originating in its respective jurisdiction under the Florida Contraband Forfeiture Act for any matters which arise from a mutual aid event that is covered by this Cooperation Agreement. Each respective party, upon successfully prosecuting a forfeiture action, shall equitably share in those proceeds seized and forfeited, as acceptable to the Chief of Police of the City of Miami Beach and the Chief of Police of the City of Opa-Locka.

SECTION IX: INSURANCE

Each party shall provide, upon request, satisfactory proof of liability insurance by one or more of the means specified in Section 768.28(16)(a), Florida Statutes, in an amount which is, in the judgment of the governing body of that party, at least adequate to cover the risk to which that party may be exposed. Should the insurance coverage, however provided, of any party be canceled or undergo material change, that party shall notify all parties to this agreement of such change within ten (10) days of receipt of notice or actual knowledge of such change.

SECTION X: EFFECTIVE DATE

This Cooperation Agreement shall take effect upon execution and approval by both parties and shall continue in full force and effect until December 31, 2028. Under no circumstances may this agreement be renewed, amended, or extended except in writing.

SECTION XI: CANCELLATION

Either party may cancel its participation in this Cooperation Agreement at any time upon delivery of written notice to the other party.

In witness whereof, the parties hereto cause to these presents to be signed on the date specified.

AGREED TO AND ACKNOWLEDGED this ____ day of _____, 2023.

CITY OF MIAMI BEACH, FLORIDA

_____
WAYNE A. JONES
CHIEF OF POLICE

Date: _____

_____
ALINA T. HUDAK
CITY MANAGER

Date: _____

ATTEST:

_____
RAFAEL E. GRANADO, CITY CLERK

CITY OF OPA-LOCKA, FLORIDA

_____
KENNETH D. OTTLEY
CHIEF OF POLICE

Date: _____

_____
DARVIN WILLIAMS
INTERIM CITY MANAGER

Date: _____

ATTEST:

_____
JOANNA FLORES, CITY CLERK

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION

City Attorney MAF 9-28-23 Date

Sponsored by: Interim City Manager

RESOLUTION NO. XX-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE RETIREMENT AND CONVEYANCE OF THE CITY OF OPA-LOCKA POLICE DEPARTMENT CANINE THOR TO HIS HANDLER; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Canine Thor is a 3 year 11-month-old, intact male Belgian Malinois, who was obtained by the City of Opa-locka Police Department on March 24, 2021; and

WHEREAS, Canine Thor has been with his current handler, Officer Victor Riveron since December 15, 2022; and

WHEREAS, Canine Thor has been diagnosed by his veterinarian, Dr. Herrington, with multiple ongoing comorbidities making him unfit to return to active duty; and

WHEREAS, pending final disposition, Officer Victor Riveron releases the City of Opa-Locka for any and all liability on behalf of the canine, as documented by the attached signed release form, attached hereto as Exhibit "A"; and

WHEREAS, the City Commission of the City of Opa-Locka finds that it is in the best interest of the Opa-locka Police Department and Canine Thor that the dog be retired and donated to his handler, Officer Victor Riveron.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA LOCKA, FLORIDA:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka hereby authorizes the retirement and conveyance of the City of Opa-Locka Police Department Canine Thor to his handler, Officer Victor Riveron.

Section 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the Interim City Manager, following review by the City Attorney and without need of

public hearing, by filing a corrected copy of same with the City.

Section 4. EFFECTIVE DATE.
This Resolution shall take effect immediately upon adoption and is subject to the approval of the Governor or his designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

City of Opa-locka
Agenda Cover Memo

DocuSigned by:
C46C07C1E8DE492...

City Manager:	Darvin Williams			**CM Signature:**				
Department Director:	Interim Chief Kenneth D. Ottley			**Department Director Signature:**				
Commission Meeting Date:	01.10.2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
		X	**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		X
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex:		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
		X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐					
Sponsor Name	Interim City Manager		**Department:**		City Manager			

Short Title:

A resolution directing the Interim City Manager to authorize the retirement and conveyance of the City of Opa-locka Police Department Canine Thor to his handler.

Staff Summary:

Canine Thor is a 3 year 11-month old, intact male Belgian Malinois, who was obtained by the City of Opa-locka Police Department on March 24, 2021. Canine Thor has been with his current handler, Officer Victor Riveron since December 15, 2022. Canine Thor has been diagnosed by his veterinarian, Dr. Herrington, with multiple ongoing comorbidities making him unfit to return to active duty. It is in the best interest of the Opa-locka Police Department and Canine Thor that the dog be retired and donated to his handler, Officer Victor Riveron. Pending final disposition, Officer Victor Riveron releases the City of Opa-locka for any and all liability on behalf of the canine, as documented by the attached signed release form.

DocuSign Envelope ID: 85446A46-4C76-4F5B-A9D4-4AC6364853C8

Financial Impact: There is no financial impact associated with this retirement. The cost of a replacement canine will be addressed in a future agenda item.

Proposed Action:

Staff recommends the City Commission approve legislation directing the Interim City Manager to authorize the retirement and conveyance of Canine Thor to his handler, Officer Victor Riveron.

Attachment:

1. Release
2. Email from licensed Veterinarian
3. Retired Animal Custody Affidavit
4. Canine History

MEMORANDUM
CITY OF OPA-LOCKA POLICE DEPARTMENT

DATE: October 26, 2023

TO: Darvin Williams/Interim City Manager

FROM: Kenneth D. Ottley/Interim Chief of Police

SUBJECT: Retirement of Canine Thor

Attached please find required documents to request approval of the retirement and conveyance of the City of Opa-locka Police Department Canine Thor to his handler, Officer Victor Riveron.

Canine Thor is a 3 year 11-month old, intact male Belgian Malinois, who was assigned to the City of Opa-locka Police Department March 24, 2021. Canine Thor has been with his current handler, Officer Victor Riveron since December 15, 2022. Canine Thor has been diagnosed with multiple ongoing comorbidities making him unfit to return to active duty.

Based on the recommendation of his veterinarian, Dr. Herrington, it is in the best interest of the Opa-locka Police Department and Canine Thor, that the dog be retired and donated to his handler, Officer Victor Riveron. Pending final disposition, Officer Victor Riveron releases the City of Opa-locka for any and all liability on behalf of the canine, as documented by the attached signed release form.

Authority to approve this request pursuant to approval by the City of Opa-locka Board of Commissioners.

KO/kec
Attachments (4)

1. Release
2. Email from Licensed Veterinarian
3. Retired Animal Custody Affidavit
4. Canine History

RELEASE

In consideration for the award of Canine Thor, to my custody, pending the approval by the Mayor, I hereby agree to assume full control of, and responsibility for, the care and custody of Canine Thor.

I further assume liability for Canine Thor and agree to hold harmless and fully indemnify the City of Opa-locka and their employees, officers, and agents for any acts by Canine Thor.

Signature: _____ 10/31/23

Officer Victor Riveron
Recipient

Date

Signature: _____ 10-31-23.

Sergeant Jacksonville Pelaez
Witness

Date

Signature: _____ 10/31/23

Acting Captain Cory Krotenberg
Witness

Date

OPA-LOCKA POLICE DEPARTMENT

Karen Conde <kconde@opalockapd.com>

Fwd: Canine Officer Thor, requested medical retirement letter.

1 message

Cory Krotenberg <ckrotenberg@opalockapd.com> Tue, Sep 26, 2023 at 4:52 PM
To: Kenneth Ottley <kottley@opalockapd.com>, Karen Conde <kconde@opalockapd.com>

Begin forwarded message:

From: Victor Riveron <vriveron@opalockapd.com>
Date: September 26, 2023 at 4:47:20 PM EDT
To: Jacksonville Pelaez <jpelaez@opalockapd.com>, Cory Krotenberg <ckrotenberg@opalockapd.com>
Subject: Fwd: Canine Officer Thor, requested medical retirement letter.

Good afternoon, attached is the requested letter for k9 Thor.

Best regards,
Ofc V.Riveron

Get Outlook for iOS

From: James Herrington <James.Herrington@vca.com>
Sent: Tuesday, September 26, 2023 8:39:49 AM
To: vriveron@opalockapd.com <vriveron@opalockapd.com>
Subject: Canine Officer Thor, requested medical retirement letter.

To whom it may concern,

This letter is regarding canine officer Thor, a 3-year 11month old, intact male Malinois, handler Riveron. My understanding is that medical recourses for the ongoing veterinary care of Thor have reached the limit. Thor has multiple ongoing comorbidities that will require further medical expense. Thor is presently unfit for return to active duty.

Respectfully,

Jim Herrington DVM, DABVP, CCRP

Medical Director AU1000

RETIRED ANIMAL CUSTODY AFFIDAVIT

Pursuant to the City of Opa-locka and approval by the City of Opa-locka Board of Commissioners, authorization is hereby granted to place retired animal, **Canine Thor, a Belgian Malinois, in custody of Officer Victor Riveron of the Opa-Locka Police Department**.

CRITERIA

Attached herein is an email from **Dr. James Herrington**, a licensed veterinarian, VCA Hollywood Animal Hospital, under care agreement with the City of Opa-locka, Police Department. The email certifies that the above mentioned animal no longer meets the requirements for service with the City of Opa-locka.

Furthermore, where appropriate, **Officer Victor Riveron** meets the requirements to adopt or receive the above mentioned animal. Also, a Release has been fully signed and witnessed which holds harmless and fully indemnifies the City of Opa-locka, their employees and agents for any acts of the retired animal.

Recommended by: _____ 11/1/2023.

Kenneth D. Ottley
Interim Chief of Police
Opa-locka Police Department

Date

Approved by: _____ _____

Darvin Williams, MBA
Interim City Manager
City of Opa-locka

Date

HISTORY
K9 Thor - ID 0130

K9 Thor came to the department on March 24th, 2021 and was assigned to Officer Louis XVI. K9 Thor completed K9 School on January 8, 2022.

According to Officer Louis XVI, K9 Thor completed approximately 10-20 deployments and had 5-10 non-contact apprehensions. K9 Thor made one (1) contact apprehension on July 20, 2022.

****

On December 15, 2022, K9 Thor was reassigned to Officer Victor Riveron. K9 Thor attended and successfully completed an additional K9 School at the Miramar Police Department graduating on March 24, 2023.

DEPLOYMENTS WITH OFFICER VICTOR RIVERON

#1 Tuesday 4/4/23 @ 2110
REF CASE 23-0405-001
QTH: 2095 NW 141 ST
Synopsis: 22/32 aggravated assault. Subject was a black male wearing a black shirt with white letters in the front and black shorts, approximately 6 feet tall. Subject was part of a 22 ring with a Chop Shop at the above listed location. Assistance was requested from Miami Gardens Police Department K-9 Units due the size of the perimeter.

K-9 Thor was deployed on the ground at approximately 2230 hours. Wind was out of the east. The search was conducted out of the west using the wind to K-9 Thor's advantage. The first business was not able to be checked due to three large dogs inside the property and no viable access for K-9 Thor.

The second property was searched with negative results.

The area where the subject was last seen by CID units was searched. K-9 Thor alerted to a small fenced area in car parking lot on the east side and confirmed by a Miami Gardens K-9 Team; however, no subject was found.

#2 Wednesday 04/07/2023
QTR 1700 HOURS
CASE # 22-1005-018
QTH: 13875 NW 22ND AVE, APT 265 (BRICKS)
On Wednesday 04/07/2023 at approximately 1700 hours, I along my partner K9 Thor assisted CID with the apprehension of a wanted subject identified as a black male. The incident location

was 13875 NW 22ND AVE, APT 265 (BRICKS). The apartment was located on the second floor on the south building with the front door facing north.

The subject was last seen by units on scene hiding underneath the bed inside the last bedroom facing south. K9 announcements were given in an effort for subject to surrender. Getting no response, K9 Thor was casted inside the bedroom and commanded to find subject. During the search the subject began verbally alerting that he would be surrendering. Subject gave up upon deployment of K-9 Thor. Officer Riveron then secured his partner K9 Thor by his hardness and began giving the subject loud and clear verbal commands. Subject was taken into custody by assisting PRT units from Miami-Dade Police Department and turned over to Opa-Locka Police Department units without incident. No further information.

#3 Sunday 5/14/23
2375 NW 149 ST (ROCK & ROLL TRAILERS)
Alarm / made entry with K9 Thor / No alerts or change of behavior given

#4 Thursday 5/18/23
14201 NW 23 PI (RESIDENCE)
Responded to a 26 in progress – black male wearing green hoodie in the rear of residence. K9 Thor used to clear the backyard. No alerts or change in of behavior, subject gone out of area prior to arrival.

#5 Wednesday 05/31/23
Case: 230531-002
Signal: 32 Stabbing
Subject: B/M
Location: 500 Jann Ave Apt #7
K9 Thor was deployed to assist CID with the location of a stabbing subject who was possible hiding inside of an empty apartment. Next door neighbors stated they heard noises from the attic. After giving K9 announcements k9 Thor was given the search command. The deployment produced negative results for a subject.

NON BITE APPREHENSIONS

04/07/2023
CASE # 22-1005-018
QTH: 13875 NW 22ND AVE, APT 265 (BRICKS)
Assisted CID with the apprehension of subject

Subject was hiding in the closet. Subject gave up before deployment of K-9 Thor.

****

Sponsored By: Interim City Manager

RESOLUTION NO. 24-

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, ACCEPTING THE PROPOSAL OF KING'S WRECKER SERVICE, INC. FOR CITYWIDE TOWING SERVICES, PURSUANT TO RFP NO. 23-1019200 AND FURTHER AUTHORIZING THE INTERIM CITY MANAGER TO ENTER INTO AN AGREEMENT WITH KING'S WRECKER SERVICE, INC. FOR SAID SERVICES, IN A FORM ACCEPTABLE TO THE CITY ATTORNEY; PROVIDING FOR ADOPTION OF REPRESENTATIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on September 21, 2023, the City of Opa-Locka ("City") published Request for Proposals (RFP) No. 23-1019200 to obtain services for citywide towing services within the City; and

WHEREAS, six (6) sealed proposals was received by the City Clerk's Office and certified by the City Clerk on October 23, 2023; and

WHEREAS, an Evaluation Committee reviewed the proposals and subsequently selected King's Wrecker Service, Inc. as the most responsive responsible bidder; and

WHEREAS, King's Wrecker Service, Inc. pricing proposal adopts the pricing schedule as outlined by Miami-Dade County ("County"). The most current rate schedule was published by the County on October 1, 2023 and is provided herein as Exhibit "A". These fees are reviewed and modified annually by Miami-Dade County. Vendor pricing will be adjusted as the County schedule is modified; and

WHEREAS, King's Wrecker Service, Inc. tows vehicles for over a dozen Police Departments in Miami Dade County and has several private property towing contracts. The company is also experienced in towing oversized loads, with an array of trailers and equipment to service towing requests; and

WHEREAS, the City Commission finds that acceptance of King's Wrecker Service, Inc.'s proposal for Citywide Towing Services and entering into an agreement with said company, is in the best interest of the City of Opa-Locka and its residents.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA- LOCKA, FLORIDA:

SECTION 1. The recitals to the preamble herein are incorporated by reference.

SECTION 2. The City Commission of the City of Opa-Locka, Florida hereby accepts the proposal of King's Wrecker Service, Inc. relating to Request for Proposals (RFP) 23-1019200, for Citywide Towing Services and authorizes the Interim City Manager to enter into an agreement for same, in a form acceptable to the City Attorney.

SECTION 3. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

SECTION 4. This Resolution shall take effect upon adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____
Commissioner Kelley	_____
Commissioner Williams	_____
Vice Mayor Ervin	_____
Mayor Taylor	_____

EXHIBIT “A”

Department of Regulatory and Economic Resources
Consumer Protection Division
601 NW 1st Court, 18th Floor
Miami, FL 33136
Telephone: (786) 469-2300
Fax: (786) 469-2311
License@miamidade.gov

MAXIMUM NON-CONSENT TOWING RATES

PRIVATE PROPERTY

Private Property Impound Tow	
Class A	$145.00
Rate if released on scene (drop rate)	$72.50
Class B	$208.65
Class C	$296.50
Class D	$377.50
No other fees may be imposed for the first 24 hours the vehicle is in the care, custody and control of the towing operator, except applicable storage fees, which begin to take effect once the vehicle has officially been stored on the grounds of the towing establishment. Pursuant to Section 713.78 (2), FL Statute, no storage fee shall be charged if the vehicle is stored for less than six (6) hours.	
Administrative Fees (After first 24 hours) Per vehicle All actual fees imposed by a state for obtaining pertinent ownership information, actual postage fees, and advertising fees per Section 713.78(15), Fla. Stat.	$38.20 Maximum of $250.00
Daily Indoor Storage – vehicles 20' or less After first 6 hours (Chargeable in 24-hour increments) Indoor storage rates may only be charged upon the direction and authorization of the owner, lien holder, insurance company representative, or investigating police agency.	$33.90
Daily Indoor Storage – vehicles longer than 20' After first 6 hours (Chargeable in 24-hour increments) Indoor storage rates may only be charged upon the direction and authorization of the owner, lien holder, insurance company representative, or investigating police agency.	$54.65
Daily Indoor Storage – small personal vehicles (i.e., motorcycles, ATVs, scooters, etc.) After first 6 hours (Chargeable in 24-hour increments) Indoor storage rates may only be charged upon the direction and authorization of the owner, lien holder, insurance company representative or investigating police agency.	$16.20
Daily Outdoor Storage – vehicles 20' or less After first 6 hours (Chargeable in 24-hour increments)	$27.60
Daily Outdoor Storage – vehicles longer than 20' After first 6 hours (Chargeable in 24-hour increments)	$48.40
Daily Outdoor Storage – small personal vehicles (i.e., motorcycles, ATV's, scooters, etc.) After first 6 hours (Chargeable in 24-hour increments)	$13.65

MAXIMUM NON-CONSENT TOWING RATES

POLICE DIRECTED

Police Directed Tow	
Class A	$149.00
Class B	$221.50
Class C	$315.00
Class D	$400.00
Per Mile Fee For Police Directed Tow (After first five (5) miles)	
Class A	$4.03
Class B	$4.67
Class C	$6.26
Class D	$7.43
Extra Time At Scene for Police Directed Tow	
Class A	$37.25
Class B	$55.38
Class C	$78.75
Class D	$100.00
First one-half hour to be included in the initial cost per call. Charges are 15 minute intervals, and must have the written documentation and approval of the investigating law enforcement agency/officer.	
Administrative Fees (After first 24 hours) Per vehicle All actual fees imposed by a state for obtaining pertinent ownership information, actual postage fees, and advertising fees per Section 713.78(15), Fla. Stat.	$40.50 Maximum of $250.00
Daily Indoor Storage – vehicles 20' or less After first 6 hours (Chargeable in 24-hour increments) Indoor storage rates may only be charged upon the direction and authorization of the owner, lien holder, insurance company representative, or investigating police agency.	$36.00
Daily Indoor Storage – vehicles longer than 20' After first 6 hours (Chargeable in 24-hour increments) Indoor storage rates may only be charged upon the direction and authorization of the owner, lien holder, insurance company representative, or investigating police agency.	$58.00
Daily Indoor Storage – small personal vehicles (i.e., motorcycles, ATV's, scooters, etc.) After first 6 hours (Chargeable in 24-hour increments) Indoor storage rates may only be charged upon the direction and authorization of the owner, lien holder, insurance company representative or investigating police agency.	$17.20
Daily Outdoor Storage – vehicles 20' or less After first 6 hours (Chargeable in 24-hour increments)	$29.35
Daily Outdoor Storage – vehicles longer than 20' After first 6 hours (Chargeable in 24-hour increments)	$51.35
Daily Outdoor Storage – small personal vehicles (i.e., motorcycles, ATV's, scooters, etc.) After first 6 hours (Chargeable in 24-hour increments)	$14.45

Lowboy Services	
Tow Rate (hook-up and first ½ hour at scene)	$314.50
Per Towed Mile After First Five (5) Miles	$5.97
Extra Labor/Wait Time At Scene	$78.63
Hazardous material clean-up (Class C & D Only) and disposal as required, mandated and/or licensed through state or local laws and approved by the investigating law enforcement agency/officer.	Towing Company prevailing rates.
Dollies – Class A (Except Private Property Tows)	$47.00/per job
Underwater Recovery Salvage Diver(s)	
First Hour/Per Diver	$168.50
Each Additional 15 Minutes after the first hour/per diver	$42.12
Charges are 15-minute intervals and must be performed by a certified/professional diver with the written documentation and approval of the investigating law enforcement officer/agency.	

City of Opa-locka
Agenda Cover Memo

City Manager:	Darvin Williams			**CM Signature:**				
Commission Meeting Date:	*01.10.2024*		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		X
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:**		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X		**Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐					
Sponsor Name	City Manager		**Department:**		City Manager			

Short Title:

A resolution authorizing the Interim City Manager to accept the proposal of King Wrecker's Service, Inc for the Citywide Towing Services pursuant to RFP No. 23-1019200 and further authorizing the Interim City Manager to enter into an agreement with King Wrecker's Service, Inc for said services.

Staff Summary:

The City is seeking qualifications from licensed and experienced towing firms to enter into an agreement for citywide towing services. On September 21, 2023, the City issued Request for Proposals (RFP) 23-1016200 and six (6) proposal submissions were certified by the City Clerk certified on October 23, 2023. King Wrecker's Service, Inc. tows for over a dozen Police Departments n Miami Dade County and several private property towing contracts.

They also specialize in oversized loads, with an array of trailers and equipment to service all towing requests. The Interim City Manager shall accept the proposal of King Wrecker's Service, Inc and further enter into an agreement for citywide towing services. Services will be rendered and expended at the rate of the Miami Dade Fee Schedule and are subject to change annually.

Financial Impact: There is no negative fiscal impact for this.

Proposed Action:

Staff recommends the City Commission approve the recommendation for King Wrecker's Service, Inc and authorize the Interim City Manager to enter into an agreement with said company.

Attachment:

RFP No. 23-1019200
Bid Certification Bid
Proposal
Miami Dade Fee Schedule

Office of the City Clerk

Joanna Flores, CMC
City Clerk

Tele: (305) 953-2800
Email: jflores@opalockafl.gov

MEMORANDUM

TO: **The Honorable Mayor/City Commission**

Cc: **Darvin Williams, Interim City Manager**
Burnadette Norris-Weeks, City Attorney

FROM: **Joanna Flores**
City Clerk

DATE: **October 30, 2023**

SUBJ: **RFP No. 23-1019200 – Citywide Towing Services**

Attached hereto you will find a copy of the Request for Proposals document and certification for the City of Opa-locka **Request for Proposals (RFP) No. 23-1019200 – Citywide Towing Services.** To save on costs associated with duplication, the original proposals will be available in the City Clerk's Office for review upon request, but only after a recommendation is released by the City Manager.

If you have any questions, please let me know.

END OF MEMORANDUM

CITY OF OPA-LOCKA
CERTIFICATION

REQUEST FOR PROPOSAL
RFP NO. 23-1019200
CITYWIDE TOWING SERVICES

I, Joanna Flores, City Clerk of the City of Opa-locka, Florida, do hereby certify that sealed proposal(s) were received by 2:00 p.m. on October 23, 2023 and opened at the Opa-locka Municipal Complex, 780 Fisherman Street, 4th Floor, Opa-locka, Florida, at 12:15 p.m. this 25th day of October, 2023.

PROPOSAL(S) RECEIVED

NAME/ADDRESS

1. **Magic Towing & Recovery**
   7851 West 22nd Avenue
   Hialeah, FL 33016
   Contact: Elisa L. Hassun, Vice President
   Tele: 305.826.5300
   Email: magictowing@msn.com

2. **Alpine Towning Inc. d/b/a Galactic Towing**
   3500 NW 67 Street
   Miami, FL 33147
   Contact: Larry Saravia, Owner
   Tele: 305.506.5798
   Email: alpinetowing4@yahoo.com

3. **Midtown Towing**
   15700 NW 7th Avenue
   Miami, FL 33169
   Contact: Michael Tur, President
   Tele: 305.754.1450

4. **Kauff's of Miami, Inc.**
   2435 Ali-baba Avenue
   Opa-locka, FL 33054
   Contact: Sean Loscalzo, Vice President
   Tele: 305.685.7593

5. **King's Wrecker Service**
   1529 NW 29 37 Street
   Miami, FL 33142
   Contact: Farah Fernandez, President
   Tele: 305.635.3170
   Email: kingswreckermiami@yahoo.com

6. **Downtown Towing Company**
301 NW 169th Avenue
North Miami, FL 33144
Contact: Timothy Del Rosal, President
Tele: 305.576.0989
Email: accounting@downtowntowning.com
Website: www.downtowntowing.com

Please note that the proposal from Alpine Towing Inc. was submitted via Demand Star (e-bid) and the proposal from Magic Towing & Recovery was submitted in person and via Demand Star (e-bid) and provided to the City Clerk by the City Manager's Office on October 19, 2023.

I further certify that proposal(s) were submitted and properly opened in the presence of the following:

Junior Bergel
Procurement Officer
City of Opa-locka

Joanna Flores, CMC
City Clerk
City of Opa-locka

By signing below, you are acknowledging receipt of the following proposals as submitted in response to the City of Opa-locka RFP No. 23-1019200 Citywide Towning Services.

	NAME OF COMPANY	Copies / USB
1.	**Magic Towing & Recovery** **7851 West 22nd Avenue** **Hialeah, FL 33016** **Contact: Elisa L. Hassun, Vice President** **Tele: 305.826.5300** **Email: magictowing@msn.com**	**DemandStar (E-bid)** **6 Copies / 1 USB**
2.	**Alpine Towning Inc. d/b/a Galactic Towing** **3500 NW 67 Street** **Miami, FL 33147** **Contact: Larry Saravia, Owner** **Tele: 305.506.5798** **Email: alpinetowing4@yahoo.com**	**DemandStar (E-bid)**
3.	**Midtown Towing** **15700 NW 7th Avenue** **Miami, FL 33169** **Contact: Michael Tur, President** **Tele: 305.754.1450**	**6 Copies / 1 USB**
4.	**Kauff's of Miami, Inc.** **2435 Ali-baba Avenue** **Opa-locka, FL 33054** **Contact: Sean Loscalzo, Vice President** **Tele: 305.685.7593**	**6 Copies / 1 USB**
5.	**King's Wrecker Service** **1529 NW 29 37 Street** **Miami, FL 33142** **Contact: Farah Fernandez, President** **Tele: 305.635.3170** **Email: kingswreckermiami@yahoo.com**	**6 Copies / 1 USB**

6. **Downtown Towing Company** — **6 Copies / 1 USB**
301 NW 169th Avenue
North Miami, FL 33144
Contact: Timothy Del Rosal, President
Tele: 305.576.0989
Email: accounting@downtowntowning.com
Website: www.downtowntowing.com

Received by: Junior Bergel, Purchasing

10-27-23
Date

City of Opa-locka

RFP NO: 23-1019200

REQUEST FOR PROPOSALS (RFP)

CITYWIDE TOWING SERVICES

CITY OF OPA-LOCKA
RFP NO. 23-1019200
CITYWIDE TOWING SERVICES

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CITY OF OPA-LOCKA REQUEST FOR PROPOSALS
RFP NO: 23-1019200
Citywide Towing Services

Sealed Proposals for a towing service will be received by the City of Opa-locka at the Office of the City Clerk, 780 Fisherman St, 4th Floor, Opa-locka, Florida 33054, **Thursday, October, 19, 2023 by 2:00 p.m.** Any RFP Package received after the designated closing time will be returned unopened. The City of Opa-locka will be accepting proposals by mail, however it is your responsibility to submit your proposal by the due date. In addition, proposals may be submitted via www.demandstar.com (e-bid). The address to submit sealed proposals is listed below:

CITY OF OPA-LOCKA
Office of the City Clerk
780 Fisherman Street, 4th
Floor Opa-locka, Florida
33054

An original and six (6) copies for a total of seven (7) plus 1 copy of the Proposal package on USB Flash Drive in PDF format shall be submitted in sealed envelopes/packages addressed to the City Clerk, City of Opa-locka, Florida, and marked **RFP for Citywide Towing Services.**

Proposers desiring information for use in preparing proposals may obtain a set of such documents by visiting the City's website at www.opalockafl.gov or www.demandstar.com.

The City reserves the right to accept or reject any and all proposals and to waive any technicalities or irregularities therein. The City further reserves the right to award the contract to that proposer whose proposal best complies with the **RFP NO: 23-1019200** requirements. Proposers may not withdraw their proposal for a period of ninety (90) days from the date set for the opening thereof.

Joanna Flores, CMC
City Clerk

CITY OF OPA-LOCKA
RFP NO: 23-1019200
City Wide Towing Services

PART I

PROPOSAL GUIDELINES

1-1. Introduction: The City of Opa-locka is requesting proposals from qualified professional companies and firms to provide **Towing Services.** The City hereby requests proposals for the selection of one or more firms (collectively, the "Consultant" or "Respondent") to provide the services set forth in this RFP.

1-2. Proposal Submission and Withdrawal: The City of Opa-locka will be accepting proposals by mail, however it is Proposer's responsibility to submit Proposer's proposal by the due date. In addition, proposals may be submitted via www.demandstar.com (e-bid). The City must receive all proposals by 2:00 p.m. on October 19, 2023. The address to submit sealed proposals is listed below:

CITY OF OPA-LOCKA
Office of the City Clerk
780 Fisherman Street, 4th
Floor Opa-locka, Florida 33054

To facilitate processing, please clearly mark the outside of the proposal package as follows: **RFP NO. 23-1019200 – Citywide Towing Services.**

This package shall also include the Proposer's return address.

Proposers may withdraw their proposals by notifying the City in writing at any time prior to the deadline for proposal submittal. After the deadline, the proposal will constitute an irrevocable offer, for a period of 90 days. Once opened, proposals become a record of the City and will not be returned to the Proposer.

The City cautions Proposers to assure actual delivery of mailed or hand-delivered proposals directly to the City Clerk's Office at 780 Fisherman Street, 4th Floor, Opa-locka, Florida 33054 prior to the deadline set for receiving proposals. Telephone confirmation of timely receipt of the proposal may be made by calling (305) 688-4611 before proposal closing time. Any proposal received after the established deadline **will not** be considered and will be returned unopened to the Proposer(s).

1-3. Number of Copies: Proposers shall submit an **original and six (6) copies (a total of 7) plus one copy on USB flash drive in PDF format** of the proposal in a sealed, opaque package marked as noted above. The Proposer will be responsible for timely delivery, whether by personal delivery, US Mail or any other delivery medium.

1-4. Development Costs: Neither the City nor its representatives shall be liable for any expenses incurred in connection with preparation of a response to this Request for Proposal. Proposers should prepare their proposals simply and economically, providing a straightforward and concise description of the Proposer's ability to meet the requirements of the RFP.

1-5. Inquiries: The City Clerk will receive written requests for clarification concerning the meaning or interpretations of the RFP, until eight (8) days prior to the submittal date. City personnel are authorized only to direct the attention of prospective Proposers to various portions of the RFP so that they may read and interpret such for themselves. No employee of the City is authorized to interpret any portion of this RFP or give information as to the requirements of the RFP in addition to what is contained in the written RFP document.

1-6. Addendum: The City may record its response to inquiries and any supplemental instructions in the form of written addenda. The City may mail written addenda up to three (3) calendar days before the date fixed for receiving the proposals. Proposers shall contact the City to ascertain whether any addenda have been issued. Failure to do so could result in an unresponsive proposal. Any oral explanation given before the RFP opening will not be binding.

All Proposers are expected to carefully examine the proposal documents. Any ambiguities or inconsistencies should be brought to the attention of the City's Purchasing Agent through written communication prior to the opening of the proposals.

1-7. Contract Awards: The City anticipates entering into an Agreement with the Proposer who submits the proposal judged by the City to be most advantageous.

The Proposer understands that this RFP does not constitute an offer or an Agreement with the Proposer. An offer or Agreement shall not be deemed to exist and is not binding until proposals are reviewed, accepted by appointed staff, the best proposal has been identified, approved by the appropriate level of authority within the City and executed by all parties. The City anticipates that the final Agreement will be in substantial conformance with this sample Agreement; nevertheless, Proposers are advised that any Agreement may result from the RFP may deviate from the Sample Agreement.

The City reserves the right to reject all proposals, to abandon the project and/or to solicit and re-advertise for other proposals.

1-8. Contractual Agreement: This RFP and Consultant/Contractor proposal shall be included and incorporated in the final award. The order of contractual precedence will be the Contract or Agreement document, original Terms and Conditions, and Proposer response. Any and all legal action necessary to enforce the award will be held in Miami-Dade County and the contractual obligations will be interpreted according to the laws of Florida. **Any additional contract or agreement requested for consideration by the Proposer must be attached and enclosed as part of the proposal.**

1-9. Selection Process: The proposals will be evaluated and assigned points. The firm with the highest number of points will be ranked first; however, nothing herein will prevent the City from assigning work to any firm deemed responsive and responsible.

The City reserves the right to further negotiate any proposal, including price, with the highest rated Proposer. If an agreement cannot be reached with the highest rated Proposer, the City reserves the right to negotiate and recommend award to the next highest Proposer or subsequent Proposers until an agreement is reached.

1-10. Public Records: Upon award recommendation or ten (10) days after opening, whichever occurs first, proposals become "public records" and shall be subject to public disclosure consistent with Chapter 119 Florida Statutes. Proposers must invoke the exemptions to disclosure provided by law in the response to the RFP and must identify the data or other materials to be protected and must state the reasons why such exclusion from public disclosure is necessary. Document files may be examined, during normal working hours.

1-11. News Releases: The Proposer shall obtain the prior approval of the City Manager's Office for all news releases or other publicity pertaining to this RFP or the service, study, or project to which it relates.

1-12. Insurance: The awarded Proposer(s) shall maintain insurance coverage reflecting at least the minimum amounts and conditions specified herein. In the event the Proposer is a governmental entity or a self-insured organization, different insurance requirements may apply. Misrepresentation of any material fact, whether intentional or not, regarding the Proposers' insurance coverage, policies or capabilities may be grounds for rejection of the proposal and rescission of any ensuing Agreement.

1. Evidence of General Liability coverage with limits not less than $1,000,000 per Occurrence/ $2,000,000 Aggregate (Including Policy Number and Policy Period);

2. Evidence of Auto Liability coverage with limits not less than $1,000,000 per Occurrence/$1,000,000 Aggregate (Including Policy Number and Policy Period);

3. Evidence of Workers' Compensation coverage with statutory limits and Employer's Liability coverage with limits not less than $100,000 (Including Policy Number and Policy Period);

4. The City listed as an additional insured (this may be specifically limited to the specific job(s) the contractor will be performing);

5. Minimum 30-day written notice of cancellation.

1-13. Licenses: Proposers, both corporate and individual, must be fully licensed and certified in the State of Florida at the time of RFP submittal. The proposal of any Proposer who is not fully licensed and certified shall be rejected.

1-14. Public Entity Crimes: Award will not be made to any person or affiliate identified on the Department of Management Services' "Convicted Vendor List". This list is defined as consisting of persons and affiliates who are disqualified from public contracting and purchasing processes because they have been found guilty of a public entity crime. No public entity shall award any contract to or transact any business in excess of the threshold amount provided in Section 287.017 Florida Statutes for Category Two (currently $25,000) with any person or affiliated on the "Convicted Vendor List" for a period of thirty-six (36) months from the date that person or affiliate

was placed on the "Convicted Vendor List" unless that person or affiliate has been removed from the list. By signing and submitting the RFP proposal forms, Proposer attests that they have not been placed on the "Convicted Vendor List".

1-15. Code Of Ethics: If any Proposer violates or is a party to a violation of the code of ethics of the City of Opa-locka or the State of Florida with respect to this proposal, such Proposer may be disqualified from performing the work described in this proposal or from furnishing the goods or services for which the proposal is submitted and shall be further disqualified from submitting any future proposals for work, goods or services for the City of Opa-locka.

1-16. Drug-Free Workplace: Preference shall be given to businesses with Drug-Free Workplace (DFW) programs. Whenever two or more proposals which are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a proposal received from a business that completes the attached DFW form certifying that it is a DFW shall be given preference in the award process.

1-17. Permits and Taxes: The Proposer shall procure all permits, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

1-18. Protests: Protests of the plans, specifications, and other requirements of the request for proposal and bids must be received in writing by the City Clerk's Office at least ten (10) working days prior to the scheduled bid opening. A detailed explanation of the reason for the protest must be included. Protests of the award or intended award of the bid or contract must be in writing and received in the City Clerk's Office within seven (7) working days of the notice of award. A detailed explanation of the protest must be included.

1-19. Termination for Convenience: A contract may be terminated in whole or in part by the City at any time and for any reason in accordance with this clause whenever the City shall determine that such termination is in the best interest of the City. Any such termination shall be affected by the delivery to the contractor at least five (5) working days before the effective date of a Notice of Termination specifying the extent to which performance shall be terminated and the date upon which termination becomes effective. An equitable adjustment in the contract price shall be made for the completed service, but no amount shall be allowed for anticipated profit on unperformed services.

1.20 SCHEDULE OF EVENTS: The following schedule shall govern this RFP. The City reserves the right to change the scheduled dates and times at its sole discretion.

No.	Event	Date	Time (EST)
1	Advertisement/ Distribution of RFP (Cone of Silence Begins)	09/21/23	
2	Closing Date for Respondent Questions	TBA	5:00 P.M.
3	City's Answers to Questions by Respondents	TBA	5:00 P.M.
4	Proposals Due Date	TBA	2:00 P.M.
5	Review of Proposals for Responsiveness	TBA	TBA
6	Recommendation to Commission	TBA	TBA
7	Commission Meeting to Select Consultant(s) and Approve Agreement(s)	TBA	TBA

PART II

NATURE OF SERVICES REQUIRED

2.1 SCOPE OF SERVICES

The City of Opa-locka is seeking qualifications from licensed and experienced towing firms to enter into an agreement for citywide towing services.

The selected consultant shall provide the services, design, labor, materials, equipment, and all incidentals necessary, as further defined in Section 2 of this request for proposals (the "Services") to provide Citywide Towing Services within the City.

The City intends to award a contract to the selected Consultant for the Services described in this RFP.

The contract term is to be for an initial one (1) year period, with up to four (4) one-year option terms. The Respondent shall include all storage, refurbishment, and maintenance prices for each year of the contract.

Contract scope includes the removal and storage of vehicles and equipment that are creating a traffic hazard, abandoned, disabled from a traffic crash, or for non-consensual removal of vehicles from public streets and areas within the City. The proposer will provide 24-hour towing services, 365 days per year. The proposer will supply the City with priority services. The selected proposer/s will be given first call for all wrecker services requested by the City unless a motorist makes a specific request for another wrecker.

Proposer shall specify in their proposal two (2) subcontractors that may be called upon to perform services in an emergency; subcontractor facilities and available equipment are subject to inspection by the City. If services are split between one or more towing firms, a staggered service schedule, at the direction of the City, shall be arranged and adhered to.

Please note: Incumbent (current) firms contracted to provide Towing services to the City of Opa-locka shall submit a proposal package in accordance with this RFP to be considered as a part of the evaluation process.

2.2 REQUESTS FOR SERVICE

All requests for service shall be made through the City of Opa-locka Police Department, Code Compliance Division, or Public Works Department. The City reserves the right to cancel a request for service at any time, including up to the time of hookup.

All vehicles being towed to Proposer's storage compound shall be taken directly to that area. If after assessing an accident scene, the Police Officer or Aide determines the safety of the public requires immediate removal of the vehicle(s), or if the owner's requested tow service does not respond within a reasonable time, the proposer may be required to remove the vehicle(s) to the side of the road or other safe area. If so, the owner of the vehicle so moved may be charged in accordance with the rate schedule.

2.3 REQUIRED RESPONSE TIME

The proposer shall respond to the request for services within forty-five (45) minutes of the call for service. Proposer shall assess the call for service immediately, if the proposer is unable to meet their

obligation within the forty-five-minute time limit, the proposer shall immediately call the requesting department back and notify them that they cannot respond in a timely manner. The proposer shall call designated City-approved subcontractor to respond to the City's call. Subsequently, the City representative making the tow request shall be appropriately notified of the call's successful hand-off to subcontractor.

2.4 PAYMENT

The City will not be responsible for the collection or payment of any charge for services rendered by reasons of having dispatched service in accordance with this contract unless such service charge is a City authorized special service. All other such services rendered shall be charged to the owner of the towed vehicle or other lawful claimant of possession. The motor vehicle owner and/or operator shall be responsible for payment of charges imposed by the Proposer in accordance with the contract rate structure.

Proposer shall ALWAYS accept payment from the vehicle owner or authorized representative for charges in any of at least three (3) of the following forms:

1. Cash, money order, or valid traveler's check.
2. Valid credit card.
3. Valid personal check showing on its face the name and address of the vehicle owner or authorized representative.
4. Electronic funds transfer applications such as Paypal, Venmo, Zelle, or similar payment application.

2.5 ANCILLARY SERVICES

Any ancillary services are to be performed only if required and appropriate. If any such charges are questioned by the City, and such ancillary services were not noted on the Vehicle Storage Receipt, it shall be the proposer's responsibility to prove the validity of such charges.

2.6 SPECIAL SERVICES

If additional duties, like those herein, but not specified, are required by the City, and the firm is able to provide those special services, those services may be requested under this contract by authorized City staff. Examples of such special services could be removal of an aircraft from water or recovery of a large piece of City equipment from mud.

In such instances, the City will depend upon the firm's experience in such matters and authorize the firm to assemble all necessary special equipment and staff, including use of subcontractors, to resolve the special or emergency. Whenever possible estimated costs for such special services shall be provided to the City prior to engaging in work and all costs shall be subject to negotiation. In any such instances the City reserves the right, time and circumstances permitting, to seek the special services elsewhere in accordance with the City procurement ordinances and code.

2.7 RELEASE

The proposer shall directly release, within thirty (30) minutes of payment, any vehicle that has not been marked "hold" by the City, providing the proper proof of identification and ownership is presented. Any vehicle towed that is marked "hold" cannot be released without written authorization from the Police Department. Vehicles can be held up to five (5) days. If the period to hold the vehicle will exceed more than five days, the Police Department shall provide written authorization to the proposer to continue to hold the vehicle, or the vehicle may be removed to the Police Department holding facility. The vehicle owner shall be responsible for storage fees from the 1st through the 5th day. The City shall be responsible for the storage fees after the 5th day. The proposer shall release any vehicle towed in at the

request of the City only to the driver with sufficient identification, or to the person whose name appears on the title or registration certificate as the registered owner of the vehicle, or to the authorized agent of such person. Persons who make application for the release of such a vehicle shall be required to present proof of ownership by presentation of a title or registration, and where applicable, proof of agency or copy of lease agreement.

The storage site must be open for release of vehicles seven (7) days per week, from 8:00 a.m. until 8:00 p.m., and when closed, shall have a sign prominently displayed indicating a telephone number in Miami-Dade County where the operator of the site can be always reached. Upon receipt of a telephoned request to open the site to release a vehicle between the hours of 8:00 p.m. and 8:00 a.m., the operator must respond to the site within one (1) hour by having an authorized employee appear at the site to allow release of the vehicle. The phone number posted shall be always kept open for the receipt of calls. If that line is busy for five (5) continuous minutes, it shall create a rebuttable presumption that the line has been disconnected in violation of this requirement. All motor vehicles that have not been claimed must be disposed of according to state and county laws.

2.8 VIEWING OF IMPOUNDED VEHICLES / REMOVAL OF PERSONAL PROPERTY

The proposer agrees to allow the registered owner of an impounded vehicle or the registered owner's agent or insurance representative, upon proper identification, to view said vehicle on the premises of the proposer. The proposer shall allow every vehicle owner or authorized representative to inspect the towed vehicle within a reasonable time upon his/her arrival at the storage facility and before payment of any charges. The vehicle owner or authorized representative shall be permitted to remove from the vehicle all personal possessions not affixed to the vehicle, including but not limited to telephones, tapes, medicines, tools, etc., and proposer shall assist any vehicle owner/agent in doing so. Vehicle owner/authorized representative shall acknowledge receipt of such property on a form provided by proposer. The above provisions regarding the inspection, viewing, and photographing of a towed vehicle and the release of personal property do not apply to vehicles marked "HOLD" by the Police Department.

2.9 DROP FEES & CITY'S RIGHT TO CANCEL TOWS OR ORDER RELEASE OF VEHICLE

Drop fees occur when a vehicle owner arrives on the scene of a tow and the vehicle has been engaged (hooked) by the tow truck, but the tow truck has not left the scene. Although Florida low allows towing companies to assess a drop fee (of not more than 50% of the posted towing rates).

Contract Manager or designee reserves the right to cancel a tow on the scene before vehicle is attached to wrecker. Contract Manager or designee also reserves the right to order the release of an already impounded vehicle.

2.10 CITY VEHICLES

City of Opa-locka vehicles and equipment up to and including 1-ton trucks and other heavy-duty Public Works vehicles shall be towed at no charge anywhere within Miami-Dade County, Broward County and Palm Beach County. The City will not be charged for any scrap or derelict vehicles disposed of by the tow company. Calls for towing Opa-locka trucks and buses shall be responded to within thirty minutes. If unable to respond during the specified time, proposer shall call a subcontractor to respond.

2.11 COMPLAINTS AND DISPUTES

All complaints will be forwarded to the Chief of Police or designee. If the incident requires formal investigation, the proposer will be notified of the complaint by certified mail. The proposer will have seven (7) business days to reply to the complaint in writing. After the investigation is completed, a memo will be forwarded to the Chief of Police regarding the outcome. If the complaint is sustained, a recommendation of disciplinary action against the proposer will be forwarded to the Chief of Police.

The proposer agrees that any complaints received by the City of Opa-locka concerning misconduct on the part of the proposer, such as excessive charges, poor business practices, damage to vehicles, etc., that cannot be resolved between the proposer and the Police Chief's designee, will be referred to the Police Chief's office for appropriate action. If the complaint is not resolved to the satisfaction of the Police Chief or the owner of the vehicle, it may be referred to the City Manager's office.

2.12 CLEANLINESS

The proposer will be responsible for the cleaning of cars and vehicles from the streets and roadways as ordered by the Police officers or aides. It shall be proposer's responsibility to remove all glass and debris deposited upon the roadway and leave the area in complete cleanliness.
If the proposer is called by the Police Department to clean up an accident scene where another wrecker service has removed the vehicle, the proposer may bill the owner of the vehicle in accordance with the rate schedule.

2.13 STORAGE FACILITY (IES)

The proposer's storage and pick-up locations shall be properly identified by signs on the exterior of the structure, i.e., visible from the adjacent access road.

Inside Storage: Shall accommodate a minimum of four vehicles. Shall have paved floor, i.e., concrete or asphalt, in a condition acceptable to the City of Opa-locka Police Department, free of dirt, standing water, vegetation, and/or articles inappropriate to or inconsistent with the operation of a towing service. It shall have a working area of 12' x 20' per vehicle, with at least an 8' ceiling. Facility shall have an outside window or ventilation system and lighting sufficient to permit processing of vehicles. It must be located within the property of the proposer's towing facility or in proximity (walking distance). Said structure shall provide complete protection from weather and unauthorized entry.

Outside Storage: Shall be of a size to hold a minimum of twenty-five (25) vehicles, properly spaced to provide access for removal or addition of vehicles. Must have a durable surface, properly drained, and enclosed. Shrubbery, trees, and lawns shall be maintained, and junk tires and auto parts shall not be stored. It must be screened from all public rights-of-way by a six (6) foot masonry wall, or fence. Any wire at the top of the wall or fence must be in addition to the six (6) foot. No repair work or servicing of vehicles shall be permitted in the storage area. Facility should have video camera required on exterior stored vehicles w/ at least 10 days of recorded time. Recording 24/7, low light cameras, or lighted storage space. The proposer shall be responsible for all thefts and damage to stored vehicles occurring while the vehicle is in its possession.

2.14 OFFICE FACILITY (IES)
Shall include telephone and rest room facilities and workspace (i.e., desk, phone). Shall have name and mailing address on front of building. Shall be separate from any other business or enterprise. Office and storage shall be at one location.

2.15 POSTING OF RATES FOR TOWING AND STORAGE
Proposers shall have contract rates posted in an area that will be plainly visible to the public (offices, waiting area, etc.) The posting shall have a heading that reads "City of Opa-locka Police Contracted Towing Rates". The rates and heading shall be posted wherever the proposer releases vehicles at the storage compound.

2.16 NON-CONSENT TOW RATES
Non-Consent Tow Rates shall be in accordance with Miami-Dade County Maximum Non-Consent Tow Rates (Refer to Attachment "B") and will only be adjusted by County revisions to these rates.

2.17 INSPECTIONS
The proposer agrees that all records, equipment, personnel, office, and storage facilities will be subject to periodic inspections by properly authorized representatives of the City of Opa-locka.

2.18 TOW TRUCK DRIVERS
Proposer shall be solely responsible for selecting, training, and employing (or otherwise retaining) such personnel as is necessary for proposer to satisfy the requirements of the Contract and to satisfactorily perform the work and services required under the Contract.

- Proposer shall perform driver's license screening on all employees with driving responsibilities and a copy of each employee's driver's license shall be kept on file by Proposer and made available upon request of the City Manager or designee.
- Proposer shall be required to provide all employees with uniforms. Which shall be subject to the prior written approval by the City Manager or designee.
- Proposer shall perform drug test screening on all employees and provide pass/fail results to the City Manager or designee, upon request.

All employees and/or other individuals retained by proposer, shall not, for any purposes, be considered to be employees of the City of Opa-locka, and proposer shall be solely responsible for their supervision and daily direction and control.

It is the intent of the City and proposer, and proposer acknowledges, that the proposer is legally considered to be an independent contractor and that neither it, nor its officers, directors, employees, agents, contractors or servants, shall, under any circumstances, be considered officers, directors, employees, contractors, agents or servants of the City, and that the City shall at no time be legally responsible or liable for any negligent acts, errors, omissions, or misconduct on the part of proposer, or any of its officers, directors, employees, contractors, agents or servants. Additionally, toward that end, proposer agrees to have no markings on either vehicles, buildings, or correspondence that indicates or tends to indicate any official relationship between the proposer and the City of Opa-locka.

Proposer shall have qualified, trained employees. It will also ensure that all drivers possess a valid

commercial driver's license in accordance with the law. Drivers used on City calls shall be neat, clean, courteous, sober, and competent in operating skills.

2.19 EQUIPMENT REQUIREMENTS

Proposers shall provide and always maintain and have available a minimum of the following equipment (described in further detail below):

- Four (4) Class A wreckers
- Two (2) slide-back carriers, Class A or B
- One (1) Class B wrecker
- One (1) Class C wrecker (or greater)

All vehicles must be owned or directly leased by the proposer. The proposer shall produce evidence of ownership or valid first party lease of the required number of wreckers and slide back carriers. A rental agreement of Class B or C wreckers does not meet the qualifications of this contract. All equipment shall be maintained in a state of readiness for response as delineated in this contract and be for the sole use of the Contractor. All wreckers will be registered and shall have the appropriate licenses to operate as wreckers. All wreckers shall display a current decal issued by the City of Opa-locka.

All equipment shall be free of unsightly damages and shall always be clean and presentable to the public. Inappropriate decals on tow trucks shall be removed. City reserves the right to determine what is inappropriate. All trucks shall have fenders, doors, hoods, and bumpers intact always when in operation. Company names, addresses, and phone numbers shall be visible on both doors of the proposer call for service vehicles.

A) CLASS "A" WRECKER:

1. Commercially manufactured unit with a rated capacity of not less than 10,000 pounds gross vehicle weight (GVW), according to the manufacturer's identification plate. If there have been any modifications to the truck chassis that changes the GVW, documentation from the dealer or manufacturer supporting the changes must be provided.
2. Dual rear wheels
3. Cab to axle dimension of not less than 56 inches
4. Commercially manufactured hydraulic boom with a minimum total winching capacity of 8,000 pounds.
5. 100 feet of 3/8 inch steel core cable per winch
6. Hydraulically operated wheel lift with retracted rating of not less than 3,500 pounds and an extended rating of not less than 2,000 pounds.
7. Tow sling or tow bar with a safe lift rating of 3,500 pounds
8. Dolly equipped
9. Slings and protective devices to prevent damage to towed vehicle
10. Motorcycle sling
11. Four-way lug wrench
12. One pair of jumper cables
13. Air Tank
14. Tire plug kit to fix flat tires

B) CLASS "A" SLIDE BACK CAR CARRIER:

1. Commercially manufactured unit, with a rated capacity of not less than 14,500 pounds GVW.
2. Cab to axle dimension of not less than 102 inches.
3. Dual rear wheels
4. Hydraulically operated winch or winches with a minimum total winching capacity of 8,000 pounds.
5. 65 feet of 3/8 inch steel core cable per winch
6. Minimum of 17' hydraulically operated slide back or tilt bed
7. Four-way lug wrench
8. Two tie down chains, each ten feet in length.
9. One pair of jumper cables

C) CLASS "B" WRECKER:

1. Commercially manufactured unit with a rated capacity of not less than 18,000 pounds GVW, according to manufacturer's identification plate. Any modifications to increase GVW must be documented by the dealer or manufacturer.
2. Cab to axle dimension of not less than 84 inches
3. Commercially manufactured boom or booms with a minimum total capacity of 24,000 pounds.
4. 200 feet of ½ inch steel core cable for each winch
5. Hydraulically operated winch or winches with a minimum total winching capacity of 24,000 pounds
6. Hydraulically operated under reach with a retracted rating of not less than 10,500 pounds and an extended rating of not less than 8,500 pounds
7. Two snatch blocks, minimum of 8,000-pound capacity each
8. Two scotch blocks
9. Six to eight feet of extra towing chain with hooks, minimum 5,000-pound capacity
10. Slings and protective devices to prevent damage to towed vehicles
11. Four-way lug wrench
12. One pair of jumper cables

D) CLASS "B" SLIDE BACK CAR CARRIER:

1. Commercially manufactured unit with a rated capacity of not less than 20,000 pounds GVW according to the manufacturer's identification plate. Any modification to increase the GVW must be documented by the dealer or manufacturer.
2. Cab to axle dimension of not less than 138 inches
3. Dual rear wheels
4. 21 feet or longer hydraulically operated slide back or tilt bed.
5. Hydraulically operated winch or winches with a minimum winching capacity of 8,000 pounds.
6. 65 feet of 3/8 inch steel core cable
7. Two-tie-down chains, each ten feet in length
8. One snatch block, minimum 8,000-pound capacity
9. Four-way lug wrench
10. One pair of jumper cables

E) CLASS "C" WRECKER:

1. Commercially manufactured unit with a rated capacity of not less than 30,000 pounds GVW according to manufacturer's identification plate. Any modifications to increase the GVW must be documented by the dealer or the manufacturer.
2. Cab to bogey dimension of not less than 144 inches

3. Commercially manufactured boom or booms with a minimum total winching capacity of 50,000 pounds.
4. Hydraulically operated winch or winches with a minimum total winching capacity of 50,000 pounds.
5. 200 feet of 5/8 steel core cable per winch.
6. Hydraulically operated under reach with a retracted rating of not less than 25,000 pounds and an extended rating of not less than 12,000 pounds.
7. Rear support jacks or outriggers
8. Two ½ inch alloy safety chains
9. Tow bar or tow-sling equipped
10. External air hookup and minimum hoses to supply air to disabled vehicles
11. Two snatch blocks, minimum 24,000-pound capacity for each
12. Two scotch blocks
13. Spring brake-air lock
14. Six to eight feet of extra towing chain with hooks, minimum 4,000-pound capacity.

F) CLASS "D" WRECKER

1. Commercially manufactured unit with a rated capacity of not less than 52,000 pounds GVW according to the manufacturer's identification plate. Any modification to increase GVW must be documented by the dealer or manufacturer.
2. Cab to bogey dimension of not less than 180 inches
3. Commercially manufactured booms or booms with a minimum total capacity of 70,000 pounds.
4. Hydraulically operated winch or winches with a minimum total winching capacity of 70,000 pounds.
5. 200 feet of ¾ inch steel core cable per winch
6. Hydraulically operated under reach with a retracted rating of not less than 45,000 pounds and an extended rating of not less than 12,000 pounds.

7. Rear support jacks or outriggers
8. Two ½ inch alloy safety chains
9. Tow bar or tow-sling equipped
10. External air hookup and minimum hoses to supply air to disabled vehicles
11. Two snatch blocks, minimum 24,000-pound capacity for each.
12. Spring bake-air lock
13. Two scotch blocks
14. Six to eight feet of extra towing chain with hoods, minimum 4,000-pound capacity

G) EQUIPMENT REQUIRED ON EACH VEHICLE:

1. Sand or oil absorbent material
2. Heavy duty broom
3. Reflectors
4. Proper safety lights
5. Amber rotational dome light
6. Two flood lights at rear
7. Two-way radio
8. Quick-start jumper cable equipment

9. Safety cones (2 minimum, day-glow orange, 2' high)
10. Shovel
11. Axe
12. Fire extinguisher - 5 lb. dry chemical U.L. approved
13. First aid kit, minimum 16 units.
14. Crowbar or pry bar
15. Bolt cutter
16. Water
17. Tire inflation capabilities
18. Extra towing chain (8' to 10' with hooks)
19. Necessary hand tools
20. 4-way lug wrench
21. Steering wheel lock or belt or rope
22. Two jack stands
23. Flashlight
24. Six 30-minute fuses
25. Any other equipment as deemed necessary by the City.

2.20 SPECIAL EQUIPMENT

Equipment such as a lowboy, air cushions, or major street clean up equipment does not have to be part of the firm's inventory. However, the firm must demonstrate, to the satisfaction of the City that such equipment is immediately available to firm when the need for this equipment occurs.

Lowboy specifications:

1. Hydraulic roll back, flatbed, tilt, self-loading with 50,000 lbs. minimum capacity. 60,000 lbs. GVW
2. Hydraulic winch capacity of 10,000 lbs. minimum
3. Size: 48 feet long and 102" wide
4. Company must have access to a certified scale capable of weighing vehicles involved in serious or fatal accidents at the request of the investigator.

2.21 PROPOSER'S EQUIPMENT DURING STATE OF EMERGENCY OR DISASTER

Each proposer that is selected by the City of Opa-locka and awarded a contract to tow for the City shall be responsible for the following:

- The proposer that is on call or on duty for the session or time frame when an emergency or disaster strikes shall have available at least two (2) Class A wreckers or Class A flatbeds at the disposal of the City of Opa-locka Police Department.
- Proposer that are not on call or are not on duty when an emergency or disaster strikes will make available one (1) Class A wrecker or Class A flatbed to the City of Opa-locka Police Department.

The City Manager or designee will declare a state of emergency or state of disaster. The City Manager or designee will then notify each proposer that a state of emergency or state of disaster exists, and the required equipment is ordered on standby.

2.22 RADIO COMMUNICATIONS

The proposer will provide all towing vehicles used pursuant to this agreement with two-way radio communication systems. The communication shall be between the proposer's base station and all service trucks utilized in providing City towing service. The two-way radios will not be tuned to any City frequencies.

2.23 UNDERWATER DIVER
The proposer shall furnish a certified underwater diver if requested by the Police Department for removal of submerged or partially submerged vehicles. The proposer assumes all claims, liabilities, and expenses incurred by such diver. For every diver, duty time shall be computed from the time of arrival at the scene to the time vehicle or property is rigged and hoisted to dry land.

2.24 CITY DIVER
A City diver shall be used in the event of an emergency and the City will be reimbursed by the proposer at the rate provided on the Miami-Dade County Maximum Non-Consent Tow Rates (refer to Attachment "B.") Any monies reimbursed to the City by the proposer may in turn be charged back to the Owner. In the event of an emergency where a City diver is not available the proposer shall supply a diver and will charge the owner in accordance with the Miami-Dade County Maximum Non-Consent Tow Rates (refer to Attachment "B.") In the event of a non-emergency situation, vehicle owner shall be responsible for obtaining the services of a diver and wrecker for removal.

2.25 CHANGE OF TIRES / ROADSIDE ASSISTANCE
As a part of this service agreement, proposer agrees to respond to requests from the Police and City Departments to change vehicle tires where necessary and to provide roadside assistance.

2.26 REPORTS
In addition to the Vehicle Storage Receipt written by the Opa-locka Police officer or aide, or City Inspector at the scene, the following reports will be prepared and maintained at the place of business:

1. A daily log of all calls for service by the Opa-locka Police Department will be kept, and two copies submitted to the Police Department once each week, one copy to the Records Supervisor and one copy to the Police Department Designee.
2. A log of all unclaimed vehicles will be submitted to the Police Department once each month, two copies, one copy to the Records Supervisor and one copy to the Police Department Designee.
3. A notification log indicating date, time, and method of notification to the registered owner of an impounded vehicle, as in accordance with the State of Florida Statues, **EXCEPT THAT NOTIFICATION MUST BE MAILED TO REGISTERED OWNER WITHIN 48 HOURS OF PICK-UP OF VEHICLE.** The owner shall not be charged for storage for any days between 48 hours and the actual time of mailing of notification.
4. A release report, along with the administration fees collected, shall be submitted once each month to the Records Supervisor, and a copy submitted to the Police Department Designee.
5. Contractor shall copy the Contract Manager on any correspondence with the vehicle owner.

2.27 ANNUAL PERFORMANCE REVIEW, INSPECTIONS AND AUDITS
The City may conduct an annual performance review of the proposer. Criteria to be evaluated will consist of, but not be limited to, response times, complaints received, care and custody of vehicles and owners' possessions, condition of facilities and equipment, extent and clarity of records, and conduct of management and personnel. Such a review will be conducted ninety (90) days prior to the contract anniversary date and proposer will be provided a written copy of the review. Within thirty (30) days of the sending of the review, Contractor shall respond to the review in writing, and the parties shall meet to discuss the review and other pertinent subjects. A final report that will consist of the review,

proposer's written response, and a summary of the annual review meeting will be prepared by City staff with a copy sent to the City Manager and proposer. The proposer agrees that all records, equipment, personnel, office and storage facilities shall be subject to periodic checks and quarterly audits by representatives of the City without prior notice.

2.28 CRIME VICTIMS EXEMPTION

If the towed vehicle is determined by the Police Department's Police Legal Unit to be a crime scene and is being held for processing, no towing or storage charges shall be charged to the vehicle's owner.

2.29 ABANDONED AND DERELICT VEHICLES

The proposer may dispose of equipment to compensate for towing and storage charges after all responsibilities called for in accordance with Florida Statutes. The proposer agrees to maintain a log at the place of business listing date, time, and method of notification.

2.30 NON-EXCLUSIVE SERVICES

Nothing contained in this contract will prevent the owner or operator of a motor vehicle from calling a wrecker or tow truck of their choice or requesting that their vehicle be towed to a garage location or compound of his/her choice and not that of the City's proposer (s) for Towing Services, unless the disabled vehicle cannot be removed in forty-five (45) minutes or less is creating a tie up of traffic or hazardous situation, in the opinion of the officer at the scene.

2.31 SPECIAL CONDITIONS

2.31.1 MINIMUM QUALIFICATIONS

Respondents shall meet the qualifications as follows, to include but not be limited to the following:

1. To be eligible to provide towing services for the City, firms must maintain an office and adequate storage facility located in the City of Opa-locka or within a ten (10) mile radius of the City of Opa-locka (refer to Attachment "A" for boundary map). Location shall be properly identified by signs on the exterior of the structure, i.e., visible from the adjacent access road.
2. Respondents must demonstrate that they have successfully completed services like those specified herein.
3. Respondents must be regularly engaged in the towing business, be fully licensed to perform the work described herein, have prior successful experience in providing similar services during the past five (5) years, have satisfactory financial support, required equipment, staff, and organization sufficient to ensure that they can satisfactorily provide the services if awarded an exclusive service agreement.
4. Successful contractor shall not have any pending criminal or administrative charges against the firm, principal owners, partners, corporate officers, or management employees.
5. Twenty-four-hour service for release of towed vehicles shall be available.
6. Ability to always provide two (2) operators on duty to avoid delays and be able to respond to scene within forty-five (45) minutes.
7. Ability to ALWAYS accept at least three (3) forms of payment from customers.

2.31.2 COMPENSATION
In full consideration of the services of the Respondent hereunder, the Respondent shall pay on each and every vehicle towed within the City of Opa-locka, at the request of the City, an administrative charge in accordance with the Miami-Dade County Maximum Non-Consent Tow Rates (Refer to Attachment "B.") The administrative fee shall be paid automatically to the City on a monthly basis by the twentieth (20th) of the following month together with the list of tows. Failure to pay as provided for shall result in an interest penalty of 1.5% per month.

2.31.3 CITIZENS TOWING BILL OF RIGHTS
Awarded Respondents shall have the City of Opa-locka Citizen's Towing Bill of Rights (the "COMS Bill of Rights") posted inside of all service vehicles assigned to the City as well as at the pick-up office window, refer to Attachment "C". This informational sheet shall include but not be limited to all tow rates, methods of payments, and complaint contact information and shall be available in English, Spanish and Creole. The final COMS Bill of Rights to be posted will be approved in advance by the City Manager. Any change to the approved COMS Bill of Rights shall also require the prior written approval of the City Manager or designee.

2.31.4 PROHIBITION AGAINST OTHER BUSINESSES
Successful respondent(s) shall not engage directly or indirectly or through a subsidiary or other entity in the automobile paint and body repair business or salvage, junkyard or auto recycling. Further, the proposer shall not undertake any repairs to, or remove any part or parts from, any vehicle towed or stored pursuant to the provisions herein. Respondent also agrees that during the term of the agreement, contractor shall have no financial ties to a body shop/auto repair shop and will not accept any compensation for referral work on towed vehicles. The respondent agrees to refrain from soliciting any referrals from any auto body and/or repair facilities.

2.31.5 MATERIALS, INSPECTION, AND RESPONSIBILITY
The City shall have a right to inspect any vehicles/equipment/material to be used in carrying out this contract. The City does not assume any responsibility for the availability of any controlled materials or other materials and equipment required under this contract.

2.31.6 SUPERVISION
The respondent shall be responsible for their employees and Subcontractors, and for compliance with all laws and ordinances governing the work. Respondent shall always have a competent representative available to answer questions or handle problems, who shall be satisfactory to the City.

2.31.7 PROTECTION OF PROPERTY
The respondent shall take extra precaution to protect all property while conducting services. Any damage done by the respondent shall be corrected to its original or better state and shall be corrected to the satisfaction of the Contract Manager or designee.

2.31.8 PERSONNEL
The respondent shall provide a list of names, complete with Driver's Licenses of all respondent's personnel and subcontractors' personnel who will require access to the Police Department, along with a description of vehicles used, including license numbers. Respondent's personnel shall carry photo identification, commercial driver's license, and show same to City personnel at any time upon request.

The City reserves the right to request the same of Subcontractors. All workers shall, always, wear a company shirt or badge identifying the company name and individual's name. All vehicles shall have the company logo visible on the outside of the vehicle.

2.31.9 SUBCONTRACTORS AND ACCOUNT MANAGERS

Subcontractors shall not be utilized on a regular basis but on occasion and in the event of an emergency wherein the Contractor may be unable to fulfill the response time requirement due to extenuating circumstances. The City of Opa-locka shall approve all subcontractors used to respond to calls for service. The Contractor is fully responsible to the City for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by said subcontractor.

Nothing contained in the Contract Documents shall create any contractual relations between any subcontractor and the City. Subcontractor shall follow the scope of services as stated herein and shall not charge City for any tows. Prior to any Subcontractor's response to City calls for service, the Contractor shall obtain written approval of the subcontractors used within the terms of this contract and shall submit for approval to the Police Department and the Procurement Division Certificates of Insurance. Subcontractors shall maintain the types of limits of insurance as required of the Contractor. A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the services covered by these specifications.

The Contractor shall furnish in writing to the City the names of the Subcontractors to be utilized on an emergency basis. The Contractor shall not contract with any Subcontractor to whom the City has made reasonable and timely objection. City shall have the right to approve all subcontractors, Account Manager, and staff assigned to City by Contractor. City shall have the right to approve all subcontractors, Account Manager, and staff assigned to City by Contractor. The Contractor, before making any subcontract for any portion of the services, will state in writing to the City the name of the proposed subcontractor, the portion of the Services which the subcontractor is to do, the place of business of such subcontractor, and such other information as the City may require.

The City will have the right to require the Contractor not to award any subcontract to a person, firm or corporation disapproved by the City. Before entering any subcontract hereunder, the Contractor will inform the subcontractor fully and completely of all provisions and requirements of the Agreement relating either directly or indirectly to the Services to be performed. Such Services performed by such subcontractor will strictly comply with the requirements of this Contract. The City may elect to have the selected Consultant(s) provide all of these services, some of the services, or none of these services. The selected Consultant(s) is/are not guaranteed any work by the City under this solicitation. All projects will be coordinated with the City Manager and/or the Police Department.

PART III

PROPOSAL REQUIREMENTS

3-1 RULES FOR PROPOSALS

In order to maintain comparability and enhance the review process, proposals shall be organized in the manner specified below and include all information required herein. The proposal must name all persons or entities interested in the proposal as principals. The proposal must declare that it is made without collusion with any other person or entity submitting a proposal pursuant to this RFP.

3-2 SUBMISSION OF PROPOSALS

The proposal shall be submitted on 8 ½ "x 11" paper, portrait orientation, with headings and sections numbered appropriately. Ensure that all information is written legibly or typed. The following should be submitted for a proposing firm to be considered:

3.2.1 Cover Page - Show the name of Proposer's agency/firm, address, telephone number, name of contact person, date, and the proposal number and description.

3.2.2 Tab 1 - Table of Contents
Include a clear identification of the material by section and by page number.

3.2.3 Tab 2 - Letter of Transmittal

3.2.3.1 Limit to one or two pages.
3.2.3.2 Briefly state the Proposer's understanding of the work to be done and make a positive commitment to perform the work.
3.2.3.3 Give the names of the persons who will be authorized to make representations for the Proposer, their titles, addresses and telephone numbers.
3.2.3.4 Provide an official signature of a Corporate Officer certifying the contents of the Proposer's responses to the City's Request for Proposal.

3.2.4 Tab 3 - General Information

3.2.4.1 Name of Business.
3.2.4.2 Mailing Address and Phone Number.
3.2.4.3 Names and contact information of persons to be contacted for information or services if different from name of person in charge.
3.2.4.4 Normal business hours.
3.2.4.5 State if business is local, national, or international and indicate the business legal status (corporation, partnership, etc.).
3.2.4.6 Give the date business was organized and/or incorporated, and where.
3.2.4.7 Give the location of the office from which the work is to be done and the number of professional staff employees at that office.
3.2.4.8 Indicate whether the business is a parent or subsidiary in a group of firms/agencies. If it is, please state the name of the parent company.
3.2.4.9 State if the business is licensed, permitted and/or certified to do business in the State of Florida and attach copies of all such licenses issued to the business entity.

3.2.5 Tab 4 – Project Approach
Describe in detail the proposal to fulfill the requirements of the scope of services listed in section 2.2 of this RFP.

3.2.6 Tab 5 – Experience and Qualifications

3.2.6.1 Specify the number of years the Proposer has been in business.

3.2.6.2 Identify the Proposer's qualifications to perform the services identified in this RFP as listed in section 2-2 of the Scope of Services.

Include resumes, not exceeding one page each, of all key personnel who will be assigned to the City for this project.

3.2.7 Tab 6 – Schedule

3.2.7.1 Include a timetable that identifies the amount of time required to complete each component of the Program.

3.2.7.2 Indicate the earliest available start date for Proposer's project team.

3.2.7.3 Indicate the project completion date based on the date provided in 3.2.7.1.

3.2.8 Tab 7 – Pricing of Services

3.2.8.1 Fee basis should be an all-inclusive, base fee.

3.2.9 Tab 8 – References

3.2.9.1 List a minimum of three (3) references in Florida for which the Proposer has provided towing services. Include the name of the organization, brief description of the project, name of contact person telephone number and email address.

3.2.10 Tab 9 – Additional Forms

Proposers must complete and submit as part of its Proposal all the following forms and/or documents.

- Proposer Qualifications
- Certification regarding debarment and suspension
- Drug Free workplace certification
- E-Verification

FAILURE TO SUBMIT ALL OF THE ABOVE REQUIRED DOCUMENTATION MAY DISQUALIFY PROPOSER.

PART IV

EVALUATION OF PROPOSALS

4-1 SELECTION COMMITTEE

A Selection Committee, consisting of City personnel, will convene, review and discuss all proposals submitted.

The Selection Committee will use a point formula during the review process to score proposals and assign points in the evaluation process in accordance with the evaluation criteria. The Proposer shall satisfy and explicitly respond to all the requirements of the RFP, including a detailed explanation of how the services shall be performed.

Each proposal will be reviewed to determine if the Proposal is responsive to the submission requirements outlined in the Solicitation. A responsive Proposal is one which follows the requirements of this Solicitation that includes all documents submitted in the format outlined in this Solicitation, is of timely submission, and has the appropriate signatures as required on each document. Failure to comply with these requirements may result in the Proposal being deemed non-responsive. The Contract (s) will be awarded to the most responsive Proposer whose Proposal best serves the interest of and represents the best value to the City of Opa-locka.

4-2 EVALUATION CRITERIA

The Committee may select and choose to invite any and/or or all firms to make presentations and be interviewed by the Committee as part of the evaluation process for this Solicitation. The Committee's decision will be communicated by staff to all Proposers. The Proposer's presentation may clarify but may not modify their submitted Proposal. Any discussion between the presenter (s) and Evaluation Committee during presentations are intended only for purposes of providing clarification in response to questions from the Committee.

Category	Points
Qualifications/Experience and Past Performance of the Firm/Respondent 1. To include years of municipal experience, ability, capacity, and skill of firm(s), whether the firm is a certified minority business enterprise, and adequacy of personnel to perform, including timeliness, stability and availability and licenses. 2. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same. 3. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same.	30
Qualifications/Experience of the Project Team 1. Professional credentials, qualifications, and accomplishments of the proposed team members to be used for City Projects.	20
References 1. Performance of similar services for governmental clients including at least three references.	20
Towing Equipment and Facilities 1. Proof of towing equipment and facilities in accordance with Section 2.	20
Price Proposal 1. Cost of proposed services	10
TOTAL	100

4-3 ORAL PRESENTATIONS

Proposers may be required to make individual presentations to the City Selection Committee in order to clarify their proposals. Only those firms with the highest rated scores in accordance with the stated criteria and their weights will be invited to give oral presentations. However, the City has the right to accept the best proposal as submitted, without discussion or negotiation.

If the City determines that such presentations are needed, a time and place will be scheduled for oral presentations. Each Proposer shall be prepared to discuss and substantiate any of the areas of the proposal submitted, and its qualifications to perform the specified services. During the oral presentations, the Proposers should relate their discussion to the evaluation criteria, which will include (but not be limited to) their approach to the project. The proposed Project Manager must be in attendance.

The Evaluation Criteria may be changed for the oral presentation evaluation phase. References and site visits (if completed) shall be included in the final evaluation criteria, along with other criteria and weights as determined by the Selection Committee. Finalists will be informed as to the revised criteria, if any, prior to their oral presentation.

Additionally, prior to award of an Agreement pursuant to this RFP, the City may require Proposers to submit such additional information bearing upon the Proposer's ability to perform the services in the Agreement as the City deems appropriate.

4-4 FINAL SELECTION

The City of Opa-locka will select the firm that meets the best interests of the City. The City shall be the sole judge of its own best interests, the proposals, and the resulting negotiated Agreement. The City's decisions will be final. Following the notification of the selected firm, it is expected that an Agreement will be executed between both parties. City staff will recommend award to the responsible Proposer whose Proposal is determined to provide overall best value to the City, considering the evaluation factors in this RFP.

4-5 AWARD AND CONTRACT EXECUTION

After review by the Selection Committee of the proposals and oral presentations a recommendation will be made to the City Manager for submission to the City Commission for final approval. Upon Commission authorization, contract negotiations will be initiated with the first ranked firm. If those negotiations are unsuccessful, the City will formally terminate negotiations with the first ranked firm and will commence contract negotiations with the next ranked firm, etc. Upon successful contract negotiations with the prevailing firm, the remaining firms will be notified that the process has been completed and that they were not selected.

RFP NO. 23-1019200
PROPOSER QUALIFICATIONS

The Proposer, as a result of this proposal, MUST hold a County and/or Municipal Contractor's Occupational License in the area of their fixed business location. The following information MUST be completed and submitted with the proposal to be considered:

1. Legal Name and Address:

   Name: _____

   Address: _____

   City, State, Zip:_____Phone/Fax: _____

2. Check One: Corporation ( ) Partnership ( ) Individual ( )

3. If Corporation, indicate:
   Date of Incorporation: _____ State in which Incorporated: _____

4. If an out-of-state Corporation, currently authorized to do business in Florida, give date of such authorization:_____

5. **Name and Title of Principal Officers** **Date Elected:**

   _____ _____

   _____ _____

   _____ _____

   _____ _____

6. The length of time in business:_____years

7. The length of time (continuous) in business as a service organization in Florida:
   _____years

8. Provide a list of at least three commercial or government references that the bidder has supplied service/commodities meeting the requirements of the City of Opa-locka RFP during the last twenty-four months.

9. A copy of County and/or Municipal Occupational License(s)

Note: *Information requested herein and submitted by the Proposers will be analyzed by the City of Opa-locka and will be a factor considered in awarding any resulting contract. The purpose is to insure that the Contractors, in the sole opinion of the City of Opa-locka, can sufficiently and efficiently perform all the required services in a timely and satisfactory manner as will be required by the subject contract. If there are any terms and/or conditions that are in conflict, the most stringent requirement shall apply.*

RFP NO: 23-1019200

PRICE PROPOSAL FORM

If Proposer fees will be paid by City, Proposer understands and agrees that the Contract Price is the lump sum to furnish and install all of the Work complete in place. Vendor's price will not be adjusted unless the City changes the scope of the Project after the Contract Date.

As such, the Vendor shall furnish all labor, materials, equipment, tools, supervision and services necessary to provide a complete, in place Project for the Proposed Price of:

LUMP SUM PRICE: $_____

SUBMITTED THIS _____ DAY OF _____ 2023.

BID SUBMITTED BY:

_____ _____

Company Telephone Number

_____ _____

Name & Title Signature

CITY OF OPA-LOCKA

CERTIFICATION REGARDING DEBARMENT, SUSPENSION PROPOSED DEBARMENT AND OTHER MATTERS OF RESPONSIBILITY

1. The Proposer certifies, to the best of its knowledge and belief, that the Proposer and/or any of its Principals:

A. Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

B. Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

C. Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph 1-B of this provision.

2. The Proposer has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any City, State or Federal agency.

A. "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions). This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

B. The Proposer shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

C. A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Proposer's responsibility. Failure of the Proposer to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Proposer non-responsive.

D. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph. (a) of this provision. The knowledge and information of a Proposer is not required to exceed

that which is normally possessed by a prudent person in the ordinary course of business dealings.

E. The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Signature_____

Printed Name _____

CITY OF OPA-LOCKA
RFP NO. 23-1019200

DRUG-FREE WORKPLACE CERTIFICATION FORM

Whenever two (2) or more bids/proposals, which are equal with respect to price, quality, and service, are received by the CITY OF OPA-LOCKA for the procurement of commodities or contractual services, a bid/proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of controlled substances is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in number (1).
4. In the statement specified in number (1), notify the employees that as a condition for working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction on or plea of guilty or no contest to any violation of Chapter 893, Florida Statutes or of any controlled substance law of the United States or any singular state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of Section 287.087, Florida Statutes.

This Certification is submitted by_____the
(Name)
_____ of_____
(Title/Position) (Company)

who does hereby certify that said Company has implemented a drug-free workplace program, which meets the requirements of Section 287.087, Florida Statutes, which are identified in numbers (1) through (6) above.

_____ _____
Date Signature

CITY OF OPA-LOCKA

NON-COLLUSION AFFIDAVIT
STATE OF FLORIDA - COUNTY OF MIAMI DADE

_____ being first duly sworn, deposes and says that:

(1) He/She/They is/are the _____
(Owner, Partner, Officer, Representative or Agent) of
_____ the PROPOSER that has submitted the attached proposal;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

(3) Such Proposal is genuine and is not a collusive or sham Proposal;

(4) Neither the said PROPOSER nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other PROPOSER, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or to refrain from Proposing in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any PROPOSER, firm, or person to fix any overhead, profit, or cost elements of the Proposal or of any other PROPOSER, or to fix any overhead, profit, or cost elements of the Proposed Price or the Proposed Price of any other PROPOSER, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the PROPOSER or any other of its agents, representatives, owners, employees or parties of interest, including this affiant.

Signed, sealed and delivered in the presence of:

_____ By: _____
Witness Signature

_____ _____
Witness Print Name and Title

NON-DISCRIMINATION AFFIDAVIT

I, the undersigned, hereby duly sworn, depose and say that the organization, business or entity represented herein shall not discriminate against any person in its operations, activities or delivery of services under any agreement it enters into with the City of Opa-locka. The same shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

By:_____

Title:_____

Sworn and subscribed before this

____day of_____, 20___

_____
Notary Public, State of Florida

_____
(Printed Name)

My commission expires:_____

E-VERIFY

Effective January 1, 2021, public and private employers, contractors and subcontractors will be required to register with, and use of the E-Verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/sub-consultants/sub-contractors) assigned by Vendor /Consultant/ Contractor to perform work pursuant to the contract with the Department. The Vendor /Consultant/ Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City; and

By entering into a Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If t contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor acknowledges it is liable to the City for any additional costs as a result of termination of the contract due to Contractor's failure to comply with the provisions herein.

E-VERIFY FORM

Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-Verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and

b) All persons (including sub-vendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Opa-locka; and

Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

Company Name: _____

Authorized Signature: _____

Print Name: _____

Title: _____

Date: _____

CITY OF OPA-LOCKA

Citywide Towing Services

RFP#23-1019200

ADDENDUM-01

This addendum updates the Due Date, Submitted Questions Date, Answering of and Questions Date for the Citywide Towing Services.

Please see the dates below:

- The Due Date for RFP 23-1019200, scheduled on Thursday, October 19, 2023, at 2:00 pm.
- The Closing Date for Proposer Questions, scheduled for 10-11-23, at 5:00 pm.
- City's Answers to Questions by Proposers, scheduled for 10-13-23 at 5:00 pm.

CITY OF OPA-LOCKA

Citywide Towing Services

RFP#23-1019200

ADDENDUM-02

This addendum updates the Due Date for the Citywide Towing Services.

Please see the dates below:

- The Due Date for RFP 23-1019200, scheduled on Monday, October 23, 2023, at 2:00 pm.

EVALUATION FORM

RFP No. 23-1019200 Citywide Towing Serices

Criterion	Weight	Description
Experience and Qualifications	30%	1. To include years of municipal experience, ability, capacity, and skill of firm(s), whether the firm is a certified minority business enterprise, and adequacy of personnel to perform, including timeliness, stability and availability and licenses. 2. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same. 3. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same.
Project Team	20%	Professional credentials, qualifications, and accomplishments of the proposed team members to be used for City Projects.
References	30%	Performance of similar services for governmental clients including at least three references.
Towing Equipment and Facilities	10%	Proof of towing equipment and facilities in accordance with Section 2.
Price Proposal	10%	
Total	**100%**	

Rating Scale	
0	Fails to Fit
1	Poor Fit
2	Fair Fit
3	Good Fit
4	Very Good Fit
5	Excellent Fit

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: _____ **Date:** _____

Signature: _____

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	
References	
Project Team	
TOWING EQUIPMENT	
Price Proposal	

Notes:

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	
References	
Project Team	
TOWING EQUIPMENT	
Price Proposal	

Notes:

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	
References	
Project Team	
TOWING EQUIPMENT	
Price Proposal	

Notes:

EVALUATION MATRIX

RFP No. 23-1019200
CITYWIDE TOWING SERVICES

Firm Name: MAGIC TOWING

Evaluation

		Reviewer Name:	Shamecca Lawson		Kenneth Ottey		Airia Austin		King Leonard		0	
Criterion	**Weight**		**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**
Experience	30%		3	0.90	3	0.90	4	1.20	3	0.90		0.00
Project Team	20%		3	0.60	3	0.60	3	0.60	2	0.40	0	0.00
References	30%		3	0.90	2	0.60	4	1.20	3	0.90		0.00
Towing Equipment	10%		3	0.30	0	0.00	5	0.50	3	0.30	0	0.00
Price Proposal	10%		4	0.40	5	0.50	4	0.40	4	0.40	0	0.00
Total	**100%**			**3.10**		**2.60**		**3.90**		**2.90**		**0.00**

Firm Name: KING'S WRECKER

Evaluation

		Reviewer Name:	Shamecca Lawson		Kenneth Ottey		Airia Austin		King Leonard		0	
Criterion	**Weight**		**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**
Experience	30%		4	1.20	4	1.20	4	1.20	3	0.90	0	0.00
Project Team	20%		5	1.00	4	0.80	4	0.80	4	0.80	0	0.00
References	30%		3	0.90	4	1.20	5	1.50	3	0.90	1	0.30
Towing Equipment	10%		4	0.40	4	0.40	3	0.30	3	0.30	0	0.00
Price Proposal	10%		4	0.40	5	0.50	4	0.40	4	0.40	0	0.00
Total	**100%**			**3.90**		**4.10**		**4.20**		**3.30**		**0.30**

Firm Name: KAUFFS

Evaluation

		Reviewer Name:	Shamecca Lawson		Kenneth Ottey		Airia Austin		King Leonard		0	
Criterion	**Weight**		**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**
Experience	30%		4	1.20	5	1.50	5	1.50	4	1.20	0	0.00
Project Team	20%		3	0.60	5	1.00	4	0.80	4	0.80	0	0.00
References	30%		3	0.90	5	1.50	5	1.50	4	1.20	1	0.30
Towing Equipment	10%		4	0.40	5	0.50	5	0.50	4	0.40	0	0.00
Price Proposal	10%		4	0.40	5	0.50	4	0.40	4	0.40	0	0.00
Total	**100%**			**3.50**		**5.00**		**4.70**		**4.00**		**0.30**

EVALUATION MATRIX

RFP No. 23-1019200
CITYWIDE TOWING SERVICES

Firm Name: MIDTOWN TOWING

Evaluation

		Reviewer Name:	Shamecca Lawson		Kenneth Ottey		Airia Austin		King Leonard		0	
Criterion	**Weight**		**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**
Experience	30%		4	1.20	5	1.50	4	1.20	4	1.20	0	0.00
Project Team	20%		5	1.00	5	1.00	5	1.00	4	0.80	1	0.20
References	30%		3	0.90	5	1.50	3	0.90	3	0.90	0	0.00
Towing Equipment	10%		4	0.40	5	0.50	4	0.40	4	0.40	0	0.00
Price Proposal	10%		4	0.40	5	0.50	4	0.40	4	0.40	0	0.00
Total	**100%**			**3.90**		**5.00**		**3.90**		**3.70**		**0.20**

Firm Name: DOWNTOWN TOWING

Evaluation

		Reviewer Name:	Shamecca Lawson		Kenneth Ottey		Airia Austin		King Leonard		0	
Criterion	**Weight**		**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**	**Rating**	**Score**
Experience	30%		4	1.20	5	1.50	5	1.50	4	1.20	0	0.00
Project Team	20%		5	1.00	5	1.00	4	0.80	3	0.60	1	0.20
References	30%		3	0.90	5	1.50	4	1.20	4	1.20	0	0.00
Towing Equipment	10%		5	1.50	5	1.50	5	1.50	4	1.20	0	0.00
Price Proposal	10%		4	0.40	5	0.50	4	0.40	4	0.40	0	0.00
Total	**100%**			**5.00**		**6.00**		**5.40**		**4.60**		**0.20**

FIRM SELECTED

Reviewer:

	MAGIC TOWING	KING'S WRECKER	KAUFFS	MIDTOWN TOWING	DOWNTOWN TOWING
Shamecca Lawson	3.10	3.90	4.70	3.90	5.00
Kenneth Ottey	2.60	4.10	5.00	5.00	6.00
Airia Austin	3.90	4.20	4.70	3.90	5.40
King Leonard	2.90	3.30	4.00	3.70	4.60
0	0.00	0.30	0.30	0.20	0.20
AVERAGE RATING	**2.50**	**3.16**	**3.74**	**3.34**	**4.24**

CITY OF OPA-LOCKA

RFP NO: 23-1019200

Dec. 05, 2023 @ 2:00 P.M.

EVALUATION MEETING, 780 FISHERMAN STREET, 4th floor, OPA-LOCKA, FL 33054

NAME	COMPANY NAME	EMAIL	PHONE #
Jay Bergel	City of Opa-locka	jbergel@opalockafl.gov	305-953-2898
Shaimecca Lawson	City of Opa-locka	Slawson@opalockafl.gov	305-953-2831
King Leonard	City of Opa-locka	Kleonard@opalockafl.gov	305-528-4386
AIRZA AUSTIN	CITY OF OPA-LOCKA	AAUSTIN@OPALOCKAFL.GOV	305-321-2595
KENNETH OTTLEY	City of Opalock Police Dept.	KOttley@opalockapd.com	786-351-7627

EVALUATION FORM

RFP No. 23-1019200 Citywide Towing Serices

Criterion	Weight	Description
Experience and Qualifications	30%	1. To include years of municipal experience, ability, capacity, and skill of firm(s), whether the firm is a certified minority business enterprise, and adequacy of personnel to perform, including timeliness, stability and availability and licenses. 2. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same. 3. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same.
Project Team	20%	Professional credentials, qualifications, and accomplishments of the proposed team members to be used for City Projects.
References	30%	Performance of similar services for governmental clients including at least three references.
Towing Equipment and Facilities	10%	Proof of towing equipment and facilities in accordance with Section 2.
Price Proposal	10%	
Total	**100%**	

Rating Scale	
0	Fails to Fit
1	Poor Fit
2	Fair Fit
3	Good Fit
4	Very Good Fit
5	Excellent Fit

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: King Leonard **Date:** 12-5-23

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:
36 years in Towing Services
Good References

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	3
Project Team	4
TOWING EQUIPMENT	4
Price Proposal	4

Notes:
45 years in Towing Services
Very Good Fleet list

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	4
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:
25 years in Towing Services
Good Fleet list

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: King Leonard **Date:** 12-5-23

Signature:

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	2
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:
30 year in Towing Service
Need more references

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	4
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:
Over 25 years Towing services
Good references

Firm Name: Superior Towing Kauff

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	4
TOWING EQUIPMENT	4
Price Proposal	4

Notes:
54 years Towing Services
Good References
Good fleet Over 20 Towing Trucks

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: AIRIA AUSTIN **Date:** 12-05-2023

Signature: A. Austin

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	3
Project Team	4
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

BEEN IN THE BUSINESS A VERY LONG TIME
LIMITED NUMBER.
VERY GOOD LISTINGS.
SUBSTANTIAL LIST OF EQUIPMENT.
MEETS OUR STANDARDS.

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	5
TOWING EQUIPMENT	3
Price Proposal	4

Notes:

IN BUSINESS FOR QUITE A LONG TIME
VERY GOOD REFERENCES
VERY GOOD TEAM
NO LOW-BOY REFLECTED IN INVENTORY
MEETS OUR STANDARDS

Firm Name: Superior Towing / Kauff

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	4
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

IN SERVICE FOR A VERY LONG TIME
WIDE VARITY OF REFERENCES
WELL ROUNDED TEAM
ALL EQUIPMENT NEEDED BY THE CITY LISTED RESPONSE (OWN).
MEETS AND EXCEEDS CITY STANDARDS.

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: AZRIA AUSTIN **Date:** 12-05-2025

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

IN BUSINESS FOR A VERY LONG TIME
LARGE LIST OF REFERENCES
WELL ROUNDED TEAM
LARGE FLEET OF EQUIPMENT RESPONSE ITEMS
MEETS THE CITY REQUIREMENTS.

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	4
Project Team	4
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

LONG-TERM TOW COMPANY
WELL REPRESENTED IN THE INDUSTRY.
LARGE TEAM
VERY LARGE LIST OF EQUIPMENT LOW-BOY RESPONSE ITEMS
MEETS THE CITY REQUIREMENTS

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	4
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

BEEN IN THE BUSINESS FOR A LONG TIME
WELL REPRESENTED IN THE INDUSTRY.
WELL ROUNDED TEAM INCLUDING DIVERS
EXTENSIVE FLEET OF EQUIPMENT RESPONSE ITEMS
MEETS THE CITY REQUIREMENTS

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: CHIEF KENNETH D. OTTLEY **Date:** 12/5/2023

Signature:

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	3
Project Team	2
TOWING EQUIPMENT	
Price Proposal	3

Notes: Video Zoom Attorney.
Contracts w/ FHP + Hialeah
Cert of Occupancy - own Property
FREE Police + City Tow. % set By City.
STANDARD.

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	4
TOWING EQUIPMENT	4
Price Proposal	5

Notes: Docs only.
Contract Sweetwater, Miami Gardens.
STANDARD.

Firm Name: Superior Towing / Kauff

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes:
Well known - Great Reputation.
Ft Meyers - worked in/ city & County for Decades.
Experienced.
Standard.

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: CHIEF KENNETH OTTOY **Date:** 12/5/23

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes:

Experienced Staff
OLPD Support to Operations
Disaster Response.

Pricing and ADMIN FEE.

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes:

- OK
- OK
- Knowledgeable.
Great list of Equipment.

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes:

* DIVE TEAM - Submerged Vehicles
Long History/experience.
OK.
Disaster Response.
Great list of Equipment.
* Standard

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: Sha'mecca Lawson **Date:** 12/05/23

Signature:

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	3
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:

The company is a minority owned company established since 1993. They have current agreements with the City of Hialeah and Florida Highway Patrol.

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

The company is a Florida Corporation established in 1984. They are based in Miami and is a 100% woman owned company. They have current agreements with Sweetwater, Miami Gardens, and MDC Internal Services.

Firm Name: ~~Superior Towing~~ Kauff's

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	3
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

The company is located in the City of Opa-locka and was established in 1979. Kauff's does not have any contracts with other municipalities, however their parent company, Guardian has contracts with 6 municipalities.

EVALUATION FORM

RFP No. 23-0706200 Feasibility Study for Parking Meters

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: Shaimecca Lawson **Date:** 12/05/23

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

The company was incorporated in 1987, and has supplied service to multiple agencies. They currently have contracts with 13 municipal agencies.

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

The company was incorporated Since 1988. They displayed a large fleet of tow vehicles to accomodate the City of Opalocka. They have current agreements with 4 municipalities.

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

This company has been in business for many years and have several contracts with other municipalities.

CITY OF OPA-LOCKA

RFP NO: 23-1019200

Dec. 05, 2023 @ 2:00 P.M.

EVALUATION MEETING, 780 FISHERMAN STREET, 4th floor, OPA-LOCKA, FL 33054

NAME	COMPANY NAME	EMAIL	PHONE #
Jay Bergel	City of Opa-locka	jbergel@opalockafl.gov	305-953-2898
Shaimecca Lawson	City of Opa-locka	Slawson@opalockafl.gov	305-953-2831
King Leonard	City of Opa-locka	Kleonard@opalockafl.gov	305-528-4386
~~AIRZA~~ AUSTIN	CITY OF OPA-LOCKA	AAUSTIN@OPALOCKAFL.GOV	305-321-2595
KENNETH OTTLEY	City of Opalock Police Dept.	KOttley@opalockapd.com	786-351-7627

EVALUATION FORM

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

Criterion	Weight	Description
Experience and Qualifications	30%	1. To include years of municipal experience, ability, capacity, and skill of firm(s), whether the firm is a certified minority business enterprise, and adequacy of personnel to perform, including timeliness, stability and availability and licenses. 2. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same. 3. To be eligible to respond, the Consultant shall have five (5) years of continuous operation under the same entity name and provide proof of same.
Project Team	20%	Professional credentials, qualifications, and accomplishments of the proposed team members to be used for City Projects.
References	30%	Performance of similar services for governmental clients including at least three references.
Towing Equipment and Facilities	10%	Proof of towing equipment and facilities in accordance with Section 2.
Price Proposal	10%	
Total	**100%**	

Rating Scale	
0	Fails to Fit
1	Poor Fit
2	Fair Fit
3	Good Fit
4	Very Good Fit
5	Excellent Fit

EVALUATION FORM

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: King Leonard **Date:** 12-5-23

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:
36 years in Towing Services
Good References

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	3
Project Team	4
TOWING EQUIPMENT	4
Price Proposal	4

Notes:
45 years in Towing Services
Very Good Fleet list

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	4
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:
25 years in Towing Services
Good Fleet list

EVALUATION FORM

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: King Leonard **Date:** 12-5-23

Signature:

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	2
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:

30 year in Towing Service
Need more references

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	4
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:

Over 25 years Towing services
Good references

Firm Name: Superior Towing Kauff

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	4
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

54 years Towing Services
Good References
Good fleet Over 20 Towing Trucks

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: AIRA AASTIN **Date:** 12-05-2023

Signature: A. Aastin

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	3
Project Team	4
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

BEEN IN THE BUSINESS A VERY LONG TIME
LIMITED NUMBER.
VERY GOOD LISTINGS.
SUBSTANTIAL LIST OF EQUIPMENT.
MEETS OUR STANDARDS.

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	5
TOWING EQUIPMENT	3
Price Proposal	4

Notes:

IN BUSINESS FOR QUITE A LONG TIME
VERY GOOD REFERENCES
VERY GOOD TEAM
NO LOW-BOY REFLECTED IN INVENTORY
MEETS OUR STANDARDS

Firm Name: Superior Towing / Kauff

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	4
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

IN SERVICE FOR A VERY LONG TIME
WIDE VARITY OF REFERENCES
WELL ROUNDED TEAM
ALL EQUIPMENT NEEDED BY THE CITY LISTED RESPONSE (OWN.
MEETS AND EXCEEDS CITY STANDARDS.

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: AZRIA AUSTIN **Date:** 12-05-2023

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

IN BUSINESS FOR A VERY LONG TIME
LARGE LIST OF REFERENCES
WELL ROUNDED TEAM
LARGE FLEET OF EQUIPMENT RESPONSE ITEMS
MEETS THE CITY REQUIREMENTS.

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	4
Project Team	4
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

LONG-TERM TOW COMPANY
WELL REPRESENTED IN THE INDUSTRY.
LARGE TEAM
VERY LARGE LIST OF EQUIPMENT CO-BOG RESPONSE ITEMS
MEETS THE CITY REQUIREMENTS

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	4
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

BEEN IN THE BUSINESS FOR A LONG TIME
WELL REPRESENTED IN THE INDUSTRY.
WELL ROUNDED TEAM INCLUDING DIVERS
EXTENSIVE FLEET OF EQUIPMENT RESPONSE ITEMS
MEETS THE CITY REQUIREMENTS

EVALUATION FORM

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: CHIEF KENNETH D. OTTEN **Date:** 12/5/2023

Signature:

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	3
Project Team	2
TOWING EQUIPMENT	
Price Proposal	3

Notes: Video Zoom Attorney
Contracts w/ FHP & Hialeah
Cert of Occupancy - Own Property
FREE POLICE + City TOW's % set By City.
STANDARD.

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	4
TOWING EQUIPMENT	4
Price Proposal	5

Notes: Docs only.
Contract Sweetwater, Miami Gardens.
STANDARD.

Firm Name: Superior Towing / Kauff

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes: Well known - Great Reputation.
FT Meyers - worked in/ city & County for Decades.
Experienced.
Standard.

EVALUATION FORM

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: CHIEF KENNETH O'Toy **Date:** 12/5/23

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes:
Experienced Staff
OLPD Support to Operations
Disaster Response.
Pricing and Admin Fee.

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes:
- OK
- OK
- Knowledgeable.
Great list of Equipment.

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	5
References	5
Project Team	5
TOWING EQUIPMENT	5
Price Proposal	5

Notes:
* DIVE TEAM - Submerged Vehicles
Long History/Experience.
OK.
Disaster Response.
Great list of Equipment.
* Standard

EVALUATION FORM

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: Shaineca Lawson **Date:** 12/05/23

Signature:

Firm Name: Magic Towing

Evaluation

Criterion	Rating
Experience and Qualifications	3
References	3
Project Team	3
TOWING EQUIPMENT	3
Price Proposal	4

Notes:

The company is a minority owned company established since 1993. They have current agreements with the City of Hialeah and Florida Highway Patrol.

Firm Name: King's Wrecker

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

The company is a Florida Corporation established in 1984. They are based in Miami and is a 100% woman owned company. They have current agreements with Sweetwater, Miami Gardens, and MDC Internal Services.

Firm Name: ~~Superior Towing~~ Kauff's

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	3
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

The company is located in the City of Opa-locka and was established in 1979. Kauff's does not have any contracts with other municipalities, however their parent company, Guardian has contracts with 16 municipalities.

EVALUATION FORM

RFP No. 23-1019200 CITYWIDE TOWING SERVICES

By signing this form as an Evaluator, I certify that I have no conflict of interest.

Reviewer Name: Shaimecca Lawson **Date:** 12/05/23

Signature:

Firm Name: Midtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

The company was incorporated in 1987, and has supplied service to multiple agencies. They currently have contracts with 13 municipal agencies.

Firm Name: Downtown Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	5
Project Team	3
TOWING EQUIPMENT	5
Price Proposal	4

Notes:

The company was incorporated Since 1988. They displayed a large fleet of tow vehicles to accomodate the City of Opelousas. They have current agreements with 4 municipalities.

Firm Name: Alpine Towing

Evaluation

Criterion	Rating
Experience and Qualifications	4
References	4
Project Team	3
TOWING EQUIPMENT	4
Price Proposal	4

Notes:

This company has been in business for many years and have several contracts with other municipalities.

Sponsored by: Interim City Manager

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AUTHORIZING THE INTERIM CITY MANAGER TO PIGGYBACK THE OMNIA PARTNERS COOPERATIVE PURCHASING AGREEMENT WITH AFFORDABLE INTERIOR SYSTEMS, INC., IN AN AMOUNT NOT TO EXCEED SIXTY-ONE THOUSAND THREE HUNDRED THIRTY-SIX DOLLARS AND FORTY-FIVE CENTS ($61,336.45) TO FURNISH THE POLICE DEPARTMENT; PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, there are various areas within in the current City of Opa=Locka ("City") Police Department that require furniture replacement; and

WHEREAS, the Interim City Manager is requesting approval to piggyback the Omnia Cooperative Contract with Affordable Interior Systems, Inc. for furniture for the Opa-Locka Police Department; and

WHEREAS, the contract piggyback will be used to purchase tables, desks, office chairs, workstations and seating for the lobby area of the police department. The proposed expenditure is Sixty-One Thousand Three Hundred Thirty-Six Dollars and Forty-Five Cents ($61,336.45); and

WHEREAS, this proposed contract is based on a competitively bid contract by Region 4 Education Service Center (ESC), Houston, which serves 47 public school districts and 40 public charter schools in Texas. This is made available through the National Intergovernmental Purchasing Alliance (National IPA) cooperative purchasing organization, which makes these agreements available to the education and public sectors. The parent organization is OMNIA Partners and the contract is one of approximately 400 competitive contracts available to these sectors; and

WHEREAS, National IPA (a/k/a OMNIA Partners, Public Sector) is "the nation's largest and most experienced cooperative purchasing organization for the public sector." Their purchasing power and suppliers have produced an extensive portfolio of cooperative contracts and partnerships, making OMNIA Partners "the most valued and trusted resource for organizations nationwide"; and

WHEREAS, all contracts in National IPA's portfolio are competitively solicited and publicly awarded by a lead agency (government entity/educational institution), using a competitive solicitation process consistent with applicable procurement laws and regulations. Region 4 Education Service Center ("Region 4 ESC"), one of National IPA's lead agencies, was established in 1967 by the State of Texas under Chapter 8 of the Texas Education Code; and

WHEREAS, Region 4 Education Service Center/National IPA considered the bid submitted by Affordable Interior Systems, Inc. ("Contractor") on December 11, 2019 in response to its RFP# 19-18; and

WHEREAS, the Region 4 Education Service Center has awarded Affordable Interior Systems, Inc. a contract (Contract #R191801) to provide Furniture, Installation and Related Services. The agreement is available to thousands of government agencies nationwide through OMNIA/National IPA Partners; and

WHEREAS, on April 28, 2020, National IPA awarded Affordable Interior Systems, Inc. a contract for Furniture, Installation and Related Services (attached hereto as Exhibit "A"). The contract became effective May 1, 2020 and was set to expire on April 30, 2023. On October 24, 2023, the contract was renewed with a new expiration date of April 30, 2025; and

WHEREAS, pursuant to Section 2-318 (3) of the City's Purchasing Code allows for purchases and acquisitions under contracts of the federal government, the State of Florida or its political subdivisions and also municipal co-operative purchasing organizations and programs. The City Manager has determined that the prices of the original contract are competitive and reasonable; and

WHEREAS, the City Commission finds that it is in the best interests of the City to piggyback on the Region 4 Education Service Center/National IPA contract with Affordable Interior Systems, Inc., in order to benefit from already negotiated rates and enter into an agreement to furnish the Police Department, in an amount not to exceed Sixty-One Thousand Three Hundred Thirty-Six Dollars and Forty-Five Cents ($61,336.45).

NOW, THEREFORE, BE IT DULY RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA:

Section 1. Adoption of Representations. The above recitals are true and correct and are incorporated into this Resolution by reference.

Section 2. Authorization. The City Commission hereby authorizes a piggyback of the Region 4 ESC/National Intergovernmental Purchasing Alliance (National IPA) / Omnia Partners Contract # R191801 with Affordable Interior Systems, Inc. for qualified professional services to furnish the Police Department, in an amount not to exceed Sixty-One Thousand Three Hundred Thirty-Six Dollars and Forty-Five Cents ($61,336.45).

Section 3. **Scrivener's Errors**. Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager following review by the City Attorney and without need of public hearing, by filing a corrected copy of same with the City.

Section 4. **Effective Date.**
This Resolution shall take effect immediately upon adoption and is subject to the approval of the Governor or his designee.

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

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City of Opa-locka
Agenda Cover Memo

DocuSigned by:
Kenneth Ottley
757D9C13C58E49E...

Department Director	Interim Police Chief Kenneth Ottley		**Department Director Signature**				
City Manager:	Darvin Williams		**CM Signature:**				
Commission Meeting Date:	*01.10.2024*	**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
			X				
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*	**1st Reading**		**2nd Reading**	
			Public Hearing: *(Enter X in box)*	**Yes**	**No**	**Yes**	**No**
					X		
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: See Financial Impact Section		**Advertising Requirement:** *(Enter X in box)*	**Yes**		**No**	
						X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**				
	X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ■ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐	**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X						
Sponsor Name	City Manager		**Department:**	City Manager			

Short Title:

A resolution of the City Commission of the City of Opa-locka authorizing the Interim City Manager to piggyback the Omnia Cooperative Contract with Affordable Interior Systems, Inc. to purchase furniture for the Opa-Locka Police Department.

Staff Summary:

The City of Opa-locka Police Department is anticipated to be completed within the next sixty (60) days and staff will immediately begin to transition into the station. However, there are various areas in the current Police Department that requires furniture to be replaced. The Interim City Manager is requesting approval to piggyback Omnia Cooperative Contract with Affordable Interior Systems, Inc. for furniture for the Opa-Locka

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Police Department. The contract will be used to purchase tables, desks, office chairs, workstations and seating for lobby area. The proposed expenditure is $61,336.45.

Financial Impact: This furniture will be funded by Police Department – Office Furniture & Equipment, Account 26-521642, which is being increased by $83,000 in the FY 24 Budget Amendment #1.

Proposed Action:

Staff recommends the City Commission authorizes the Interim City Manager to piggyback the Omnia Cooperative Contract with Affordable Interior Systems, Inc. to purchase furniture for the Opa-Locka Police Department.

Attachment:

Affordable Interior Systems Quote
Omnia Cooperative Contract

FURNITURE, INSTALLATION AND RELATED SERVICES
Executive Summary

Lead Agency: Region 4 ESC

Solicitation: 19-18

RFP Issued: November 7, 2019

Pre-Proposal Date: November 21, 2019

Response Due Date: December 11, 2020

Proposals Received: #44

Awarded to: Affordable Interior Systems, Inc. (AIS) – R191801

The Board of Directors of Region 4 Education Service Center (ESC) issued RFP 19-18 on November 7, 2019, to establish a national cooperative contract for Furniture, Installation and Related Services.

The solicitation included cooperative purchasing language in Sections I. Scope of Work:

NATIONAL CONTRACT

> *Region 4 Education Service Center, as the Principal Procurement Agency, defined in Appendix D, has partnered with OMNIA Partners to make the resultant contract (also known as the "Master Agreement" in materials distributed by OMNIA Partners) from this solicitation available to other public agencies nationally, including state and local governmental entities, public and private primary, secondary and higher education entities, non-profit entities, and agencies for the public benefit ("Public Agencies"), through OMNIA Partners' cooperative purchasing program. Region 4 ESC is acting as the contracting agency for any other Public Agency that elects to utilize the resulting Master Agreement. Use of the Master Agreement by any Public Agency is preceded by their registration with OMNIA Partners (a "Participating Public Agency"). Appendix D contains additional information about OMNIA Partners and the cooperative purchasing agreement.*

Notice of the solicitation was sent to potential offerors, as well as advertised in the following:

- Region 4 ESC website
- OMNIA Partners, Public Sector website
- USA Today, nationwide
- Arizona Business Gazette, AZ
- San Bernardino Sun, CA
- Honolulu Star-Advertiser, HI
- The Advocate – New Orleans, LA
- New Jersey Herald, NJ
- Times Union, NY
- Daily Journal of Commerce, OR
- The State, SC
- Houston Community Newspapers, Cy Creek Mirror, TX
- Deseret News, UT
- Richmond Times, VA
- Seattle Daily Journal of Commerce, WA
- Helena Independent Record, MT

On January 8, 2020 proposals were received from the following offerors:

- 9to5 Seating LLC
- Affordable Interior Systems, Inc. (AIS)
- Allsteel Inc.
- Alumni Classroom Furniture Inc.
- AmTab Manufacturing Corporation
- Artcobell Corporation
- Bush Industries, Inc.
- ELB US Inc.
- ASSA Group, Inc. dba Enwork
- EPIC Business Essentials
- Exemplis LLC
- GMi Companies
- Haskell Office, LLC
- The HON Company LLC
- Indiana Furniture Industries, Inc.
- Irwin Seating Company
- Jasper Group (Jasper Seating Company, Inc.)
- Kaplan Early Learning Company
- Krueger International, Inc.
- Kwalu LLC
- LIAT, LLC
- Maxon Furniture Inc.
- Metalworks, Inc. – Great Openings
- MeTEOR Education, LLC.
- National Business Furniture, LLC
- National Office Furniture, Inc.
- NPS Public Furniture Corp
- NorvaNivel USA LP
- Office Depot, Inc.
- OFS Brands Inc.
- Origin US LLC
- Paragon Furniture, Inc.
- PS Furniture Inc.
- Rapp Productions, Inc dba FurnitureLab
- RT London
- Safco Products Co.
- School Specialty, Inc.
- SICO America, Inc.
- Spec Furniture Inc
- Special-T, LLC
- Teknion LLC
- Trendway Corporation
- VS America, Inc.
- WB Manufacturing

The proposals were evaluated by an evaluation committee. Using the evaluation criteria established in the RFP, the committee determined that eighteen (18) companies - Affordable Interior Systems, Inc. (AIS) Allsteel Inc., AM Tab Manufacturing Corporation, Exemplis LLC, The HON Company LLC, Irwin Seating Company, Jasper Group (Jasper Seating Company, Inc.), Kaplan Early Learning Company, Krueger International, Inc., Maxon Furniture Inc., Metalworks, Inc. – Great Openings, MeTEOR Education, LLC, National Office Furniture, Inc., NorvaNivel USA LP, Office Depot, Inc., OFS Brands Inc., Safco Products Co., School Specialty, Inc. Teknion LLC Trendway Corporation, VS America, Inc. - all demonstrated the ability to provide the services outlined in the solicitation while offering competitive pricing to members.

Region 4 ESC executed agreements with a contract effective date of May 1, 2020.

Contract includes:

- Systems, Beams/Blenching, Casegoods, Tables & Universal and Seating
- Products include freight to all locations within the US including Alaska and Hawaii
- Delivery and Installation will be quoted on a per project basis and subject to the same variations as inside delivery areas

Term:

Initial three-year agreement from May 1, 2020 through April 30, 2023 with the option to renew for two (2) additional one-year periods through April 30, 2025.

Pricing/Discount: Discount off List Price

DocuSign Envelope ID: 81108D99-4067-4AAA-9008-50A989A9A393

October 26, 2023

Mr. Bryan Poist
bpoist@ais-inc.com
Chief Financial Officer
Affordable Interior Systems, Inc. (AIS)
25 Tucker Drive
Leominster, MA 01453

Re: Renewal Award of Contract #R191801

Dear Mr. Poist:

Per official action taken by the Board of Directors of Region 4 Education Service Center on October 24, 2023, Region 4 ESC is pleased to announce that Affordable Interior Systems, Inc. (AIS) has been awarded an annual contract renewal for the following, based on the sealed proposal submitted to Region 4 on December 11, 2019, and subsequent performance thereafter:

Contract

Furniture, Installation and Related Services

The contract will expire on April 30, 2025, completing the fifth year of a five-year term contract. The contract is available through OMNIA Partners, Public Sector. Your designated OMNIA Partners, Public Sector contact is Christine Dorantes, at (615) 431-8182 or christine.dorantes@omniapartners.com.

The partnership between Affordable Interior Systems, Inc. (AIS), Region 4 and OMNIA Partners, Public Sector can be of great help to participating agencies. Please provide copies of this letter to your sales representative(s) to assist in their daily course of business.

Sincerely,

DocuSigned by:
Robert Zingelmann
30EE15BFEF1C4C6...

Robert Zingelmann
Chief Financial Officer, Finance and Operations Services

To: Board of Directors

From: Robert Zingelmann

Date: April 28, 2020

Subject: Recommendation of Contract Award

Region 4 ESC held a RFP opening on November 7, 2019 for RFP #19-18 for **Furniture, Installation and Related Services.** There were forty-four (44) proposals submitted:

- 9to5 Seating LLC
- Affordable Interior Systems, Inc. (AIS)
- Allsteel Inc.
- Alumni Classroom Furniture Inc.
- AmTab Manufacturing Corporation
- Artcobell Corporation
- Bush Industries, Inc.
- ELB US Inc.
- ASSA Group, Inc. dba Enwork
- EPIC Business Essentials
- Exemplis LLC
- GMi Companies
- Haskell Office, LLC
- The HON Company LLC
- Indiana Furniture Industries, Inc.
- Irwin Seating Company
- Jasper Group (Jasper Seating Company, Inc.)
- Kaplan Early Learning Company
- Krueger International, Inc.
- Kwalu LLC
- LIAT, LLC
- Maxon Furniture Inc.
- Metalworks, Inc. – Great Openings
- MeTEOR Education, LLC.
- National Business Furniture, LLC
- National Office Furniture, Inc.
- NPS Public Furniture Corp
- NorvaNivel USA LP
- Office Depot, Inc.
- OFS Brands Inc.
- Origin US LLC
- Paragon Furniture, Inc.
- PS Furniture Inc.
- Rapp Productions, Inc dba FurnitureLab
- RT London
- Safco Products Co.
- School Specialty, Inc.
- SICO America, Inc.
- Spec Furniture Inc

- Special-T, LLC
- Teknion LLC
- Trendway Corporation
- VS America, Inc.
- WB Manufacturing

After careful review of all proposals, the Evaluation Team has determined that eighteen (18) companies demonstrated the ability to provide the products and services outlined in the solicitation while offering competitive pricing to the members.

CONSIDERATION

Award of annual contract in compliance with the bid laws of the State of Texas is recommended.

RECOMMENDATION

The Evaluation Team recommends the following companies for award based on their response:

Contract	Vendor	Term of Contract
Furniture, Installation and Related Services	Affordable Interior Systems, Inc. (AIS) Allsteel Inc. Exemplis LLC The HON Company LLC Irwin Seating Company Jasper Group (Jasper Seating Company, Inc.) Kaplan Early Learning Company Krueger International, Inc. Maxon Furniture Inc. MeTEOR Education, LLC National Office Furniture, Inc. Office Depot, Inc. OFS Brands Inc. Safco Products Co. School Specialty, Inc. Teknion LLC Trendway Corporation VS America, Inc.	Three (3) years with option of two (2) one year renewals

Support documentation has been attached for your reference.
Enclosure: Bid Tab Summary

To: Dr. Pam Wells
Executive Director

From: Robert Zingelmann
Chief Financial Officer, Finance and Operations Services

Date: April 28, 2020

Re: Furniture, Installation and Related Services; RFP #19-18

The Evaluation Committee has reviewed the responses and recommend that the following companies be awarded:

- 9to5 Seating LLC
- Affordable Interior Systems, Inc. (AIS)
- Allsteel Inc.
- Alumni Classroom Furniture Inc.
- AmTab Manufacturing Corporation
- Artcobell Corporation
- Bush Industries, Inc.
- ELB US Inc.
- ASSA Group, Inc. dba Enwork
- EPIC Business Essentials
- Exemplis LLC
- GMi Companies
- Haskell Office, LLC
- The HON Company LLC
- Indiana Furniture Industries, Inc.
- Irwin Seating Company
- Jasper Group (Jasper Seating Company, Inc.)
- Kaplan Early Learning Company
- Krueger International, Inc.
- Kwalu LLC
- LIAT, LLC
- Maxon Furniture Inc.
- Metalworks, Inc. – Great Openings
- MeTEOR Education, LLC.
- National Business Furniture, LLC
- National Office Furniture, Inc.
- NPS Public Furniture Corp
- NorvaNivel USA LP
- Office Depot, Inc.
- OFS Brands Inc.
- Origin US LLC

- Paragon Furniture, Inc.
- PS Furniture Inc.
- Rapp Productions, Inc dba FurnitureLab
- RT London
- Safco Products Co.
- School Specialty, Inc.
- SICO America, Inc.
- Spec Furniture Inc
- Special-T, LLC
- Teknion LLC
- Trendway Corporation
- VS America, Inc.
- WB Manufacturing

The recommended vendors submitted offers that were determined to be most advantageous to OMNIA Partners, Public Sector members, based upon the bid tabulation. All the recommended respondents were determined to be competitively priced and strong for the specified services outlined in the RFP.

We believe all recommended vendors demonstrate the ability to provide and perform the services requested in the proposal. We will monitor their performance and determine at the end of each year if they are eligible for renewal with each new term.

This multiple award is recommended as most advantageous as it limits contract awards to the least number of suppliers necessary to meet the requirements of OMNIA Partners, Public Sector members. In order to serve the entire nation, a multiple award is recommended to provide any governmental agency with complete coverage of commodities, services and any other offering within the scope of proposal.

Please let me know if you have any questions.

DocuSign Envelope ID: EB6FC47E-8AAE-4F6B-910C-1F1016B997E5

April 28, 2020

Mr. Bryan Poist
bpoist@ais-inc.com
Chief Financial Officer
Affordable Interior Systems, Inc. (AIS)
25 Tucker Drive
Leominster, MA 01453

Re: Award of Contract #R191801

Dear Mr. Poist:

Per official action taken by the Board of Directors of Region 4 Education Service Center on April 28, 2020, we are pleased to announce that after successful negotiated terms and conditions, Affordable Interior Systems, Inc. (AIS) has been awarded an annual contract for the following, based on the sealed proposal (RFP#19-18) submitted on December 11, 2019:

Commodity/Service	**Supplier**
Furniture, Installation and Related Services	Affordable Interior Systems, Inc. (AIS)

This contract is effective May 1, 2020 and will expire on April 30, 2023. As indicated above, your contract # is R191801. This contract may be renewed annually for an additional two (2) years if mutually agreed upon by Region 4 ESC/OMNIA Partners, Public Sector and Affordable Interior Systems, Inc. (AIS).

Your participation in the proposal process is appreciated and we look forward to a successful partnership. Please feel free to provide copies of this letter to your sales representative(s) to assist in their daily course of business.

If you have any questions, please contact Christine Dorantes, the Contract Manager assigned to your contract, at (615) 431-8182 or christine.dorantes@omniapartners.com.

Sincerely,

DocuSigned by:
Robert Zingelmann
0B1D33BB0130490...

Robert Zingelmann
Chief Financial Officer, Finance and Operations Services

Region 4 Education Service Center (ESC)

Contract # R191801

for

Furniture, Installation and Related Services

with

Affordable Interior Systems, Inc.

Effective: May 1, 2020

The following documents comprise the executed contract between the Region 4 Education Service Center and Affordable Interior Systems, Inc. effective May 1, 2020:

I. Vendor Contract and Signature Form
II. Supplier's Response to the RFP, incorporated by reference

APPENDIX A

CONTRACT

This Contract ("Contract") is made as of April 28 *, 2020 by and between* Affordable Interior Systems, Inc. (AIS) *("Contractor") and Region 4 Education Service Center ("Region 4 ESC") for the purchase of Furniture, Installation, and Related Services ("the products and services").*

RECITALS

WHEREAS, Region 4 ESC issued Request for Proposals Number RFP #19-18 for Furniture, Installation, and Related Services ("RFP"), to which Contractor provided a response ("Proposal"); and
WHEREAS, Region 4 ESC selected Contractor's Proposal and wishes to engage Contractor in providing the services/materials described in the RFP and Proposal;

WHEREAS, both parties agree and understand the following pages will constitute the Contract between the Contractor and Region 4 ESC, having its principal place of business at 7145 West Tidwell Road, Houston, TX 77092.

WHEREAS, Contractor included, in writing, any required exceptions or deviations from these terms, conditions, and specifications; and it is further understood that, if agreed to by Region 4 ESC, said exceptions or deviations are incorporated into the Contract.

WHEREAS, this Contract consists of the provisions set forth below, including provisions of all attachments referenced herein. In the event of a conflict between the provisions set forth below and those contained in any attachment, the provisions set forth below shall control.

WHEREAS, the Contract will provide that any state and local governmental entities, public and private primary, secondary and higher education entities, non-profit entities, and agencies for the public benefit ("Public Agencies") may purchase products and services at prices indicated in the Contract upon the Public Agency's registration with OMNIA Partners.

1) Term of agreement. The term of the Contract is for a period of three (3) years unless terminated, canceled or extended as otherwise provided herein. Region 4 ESC shall have the right to renew the Contract for two (2) additional one-year periods or portions thereof. Region 4 ESC shall review the Contract prior to the renewal date and notify the Contractor of Region 4 ESC's intent renew the Contract. Contractor may elect not to renew by providing three hundred sixty-five days' (365) notice to Region 4 ESC. Notwithstanding the expiration of the initial term or any subsequent term or all renewal options, Region 4 ESC and Contractor may mutually agree to extend the term of this Agreement. Contractor acknowledges and understands Region 4 ESC is under no obligation whatsoever to extend the term of this Agreement.

2) Scope: Contractor shall perform all duties, responsibilities and obligations, set forth in this agreement, and described in the RFP, incorporated herein by reference as though fully set forth herein.

3) Form of Contract. The form of Contract shall be the RFP, the Offeror's proposal and Best and Final Offer(s).

4) Order of Precedence. In the event of a conflict in the provisions of the Contract as accepted by Region 4 ESC, the following order of precedence shall prevail:

   i. This Contract
   ii. Offeror's Best and Final Offer
   iii. Offeror's proposal
   iv. RFP and any addenda

5) Commencement of Work. The Contractor is cautioned not to commence any billable work or provide any material or service under this Contract until Contractor receives a purchase order for such work or is otherwise directed to do so in writing by Region 4 ESC.

6) Entire Agreement (Parol evidence). The Contract, as specified above, represents the final written expression of agreement. All agreements are contained herein and no other agreements or representations that materially alter it are acceptable.

7) Assignment of Contract. No assignment of Contract may be made without the prior written approval of Region 4 ESC. Contractor is required to notify Region 4 ESC when any material change in operations is made (i.e. bankruptcy, change of ownership, merger, etc.).

8) Novation. If Contractor sells or transfers all assets or the entire portion of the assets used to perform this Contract, a successor in interest must guarantee to perform all obligations under this Contract. Region 4 ESC reserves the right to accept or reject any new party. A change of name agreement will not change the contractual obligations of Contractor.

9) Contract Alterations. No alterations to the terms of this Contract shall be valid or binding unless authorized and signed by Region 4 ESC.

10) Adding Authorized Distributors/Dealers. Contractor is prohibited from authorizing additional distributors or dealers, other than those identified at the time of submitting their proposal, to sell under the Contract without notification and prior written approval from Region 4 ESC. Contractor must notify Region 4 ESC each time it wishes to add an authorized distributor or dealer. Purchase orders and payment can only be made to the Contractor unless otherwise approved by Region 4 ESC. Pricing provided to members by added distributors or dealers must also be less than or equal to the Contractor's pricing.

11) TERMINATION OF CONTRACT

   a) Cancellation for Non-Performance or Contractor Deficiency. Region 4 ESC may terminate the Contract if purchase volume is determined to be low volume in any 12-month period. Region 4 ESC reserves the right to cancel the whole or any part of this Contract due to failure by Contractor to carry out any obligation, term or condition of the contract. Region 4 ESC may issue a written deficiency notice to Contractor for acting or failing to act in any of the following:

      i. Providing material that does not meet the specifications of the Contract;
      ii. Providing work or material was not awarded under the Contract;
      iii. Failing to adequately perform the services set forth in the scope of work and specifications;

iv. Failing to complete required work or furnish required materials within a reasonable amount of time;
v. Failing to make progress in performance of the Contract or giving Region 4 ESC reason to believe Contractor will not or cannot perform the requirements of the Contract; or
vi. Performing work or providing services under the Contract prior to receiving an authorized purchase order.

Upon receipt of a written deficiency notice, Contractor shall have ten (10) days to provide a satisfactory response to Region 4 ESC. Failure to adequately address all issues of concern may result in Contract cancellation. Upon cancellation under this paragraph, all goods, materials, work, documents, data and reports prepared by Contractor under the Contract shall immediately become the property of Region 4 ESC.

b) Termination for Cause. If, for any reason, Contractor fails to fulfill its obligation in a timely manner, or Contractor violates any of the covenants, agreements, or stipulations of this Contract Region 4 ESC reserves the right to terminate the Contract immediately and pursue all other applicable remedies afforded by law. Such termination shall be effective by delivery of notice, to the Contractor, specifying the effective date of termination. In such event, all documents, data, studies, surveys, drawings, maps, models and reports prepared by Contractor will become the property of the Region 4 ESC. If such event does occur, Contractor will be entitled to receive just and equitable compensation for the satisfactory work completed on such documents.

c) Delivery/Service Failures. Failure to deliver goods or services within the time specified, or within a reasonable time period as interpreted by the purchasing agent or failure to make replacements or corrections of rejected articles/services when so requested shall constitute grounds for the Contract to be terminated. In the event Region 4 ESC must purchase in an open market, Contractor agrees to reimburse Region 4 ESC, within a reasonable time period, for all expenses incurred.

   i) Additional Delivery/Installation Charges: Contractor may enter into additional negotiations with a purchasing agency for additional delivery or installation charges based on onerous conditions. Additional delivery and/or installation charges may only be charged if mutually agreed upon by the purchasing agency and Contractor and can only be charged on a per individual project basis.

d) Force Majeure. If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil or military authority; insurrections; riots; epidemics; landslides; lighting; earthquake; fires; hurricanes; storms; floods; washouts; droughts; arrests; restraint of government and people; civil disturbances; explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the party having the difficulty, and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of the opposing party or parties when such settlement is unfavorable in the judgment of the party having the difficulty.

e) Standard Cancellation. Region 4 ESC may cancel this Contract in whole or in part by providing written notice. The cancellation will take effect 30 business days after the other party receives the notice of cancellation. After the 30th business day all work will cease following completion of final purchase order.

12) Licenses. Contractor shall maintain in current status all federal, state and local licenses, bonds and permits required for the operation of the business conducted by Contractor. Contractor shall remain fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of services under the Contract. Region 4 ESC reserves the right to stop work and/or cancel the Contract if Contractor's license(s) expire, lapse, are suspended or terminated.

13) Survival Clause. All applicable software license agreements, warranties or service agreements that are entered into between Contractor and Region 4 ESC under the terms and conditions of the Contract shall survive the expiration or termination of the Contract. All Purchase Orders issued and accepted by Contractor shall survive expiration or termination of the Contract.

14) Delivery. Conforming product shall be shipped within 7 days of receipt of Purchase Order. If delivery is not or cannot be made within this time period, the Contractor must receive authorization for the delayed delivery. The order may be canceled if the estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. Destination and shall be included in all pricing offered unless otherwise clearly stated in writing.

15) Inspection & Acceptance. If defective or incorrect material is delivered, Region 4 ESC may make the determination to return the material to the Contractor at no cost to Region 4 ESC. The Contractor agrees to pay all shipping costs for the return shipment. Contractor shall be responsible for arranging the return of the defective or incorrect material.

16) Payments. Payment shall be made after satisfactory performance, in accordance with all provisions thereof, and upon receipt of a properly completed invoice.

17) Price Adjustments. Should it become necessary or proper during the term of this Contract to make any change in design or any alterations that will increase price, Region 4 ESC must be notified immediately. Price increases must be approved by Region 4 ESC and no payment for additional materials or services, beyond the amount stipulated in the Contract shall be paid without prior approval. All price increases must be supported by manufacturer documentation, or a formal cost justification letter. Contractor must honor previous prices for thirty (30) days after approval and written notification from Region 4 ESC. It is the Contractor's responsibility to keep all pricing up to date and on file with Region 4 ESC. All price changes must be provided to Region 4 ESC, using the same format as was provided and accepted in the Contractor's proposal.

Price reductions may be offered at any time during Contract. Special, time-limited reductions are permissible under the following conditions: 1) reduction is available to all users equally; 2) reduction is for a specific period, normally not less than thirty (30) days; and 3) original price is not exceeded after the time-limit. Contractor shall offer Region 4 ESC any published price reduction during the Contract term.

18) Audit Rights. Contractor shall, at its sole expense, maintain appropriate due diligence of all purchases made by Region 4 ESC and any entity that utilizes this Contract. Region 4 ESC reserves the right to audit the accounting for a period of three (3) years from the time such

purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective date of termination. Region 4 ESC shall have the authority to conduct random audits of Contractor's pricing at Region 4 ESC's sole cost and expense. Notwithstanding the foregoing, in the event that Region 4 ESC is made aware of any pricing being offered that is materially inconsistent with the pricing under this agreement, Region 4 ESC shall have the ability to conduct an extensive audit of Contractor's pricing at Contractor's sole cost and expense. Region 4 ESC may conduct the audit internally or may engage a third-party auditing firm. In the event of an audit, the requested materials shall be provided in the format and at the location designated by Region 4 ESC.

19) Discontinued Products. If a product or model is discontinued by the manufacturer, Contractor may substitute a new product or model if the replacement product meets or exceeds the specifications and performance of the discontinued model and if the discount is the same or greater than the discontinued model.

20) New Products/Services. New products and/or services that meet the scope of work may be added to the Contract. Pricing shall be equivalent to the percentage discount for other products. Contractor may replace or add product lines if the line is replacing or supplementing products, is equal or superior to the original products, is discounted similarly or greater than the original discount, and if the products meet the requirements of the Contract. No products and/or services may be added to avoid competitive procurement requirements. Region 4 ESC may require additions to be submitted with documentation from Members demonstrating an interest in, or a potential requirement for, the new product or service. Region 4 ESC may reject any additions without cause.

21) Options. Optional equipment for products under Contract may be added to the Contract at the time they become available under the following conditions: 1) the option is priced at a discount similar to other options; 2) the option is an enhancement to the unit that improves performance or reliability.

22) Warranty Conditions. All supplies, equipment and services shall include manufacturer's minimum standard warranty and one (1) year labor warranty unless otherwise agreed to in writing.

23) Site Cleanup. Contractor shall clean up and remove all debris and rubbish resulting from their work as required or directed. Upon completion of the work, the premises shall be left in good repair and an orderly, neat, clean, safe and unobstructed condition.

24) Site Preparation. Contractor shall not begin a project for which the site has not been prepared, unless Contractor does the preparation work at no cost, or until Region 4 ESC includes the cost of site preparation in a purchase order. Site preparation includes, but is not limited to: moving furniture, installing wiring for networks or power, and similar pre-installation requirements.

25) Registered Sex Offender Restrictions. For work to be performed at schools, Contractor agrees no employee or employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are or are reasonably expected to be present. Contractor agrees a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at Region 4 ESC's discretion. Contractor must identify any additional costs associated with compliance of this

term. If no costs are specified, compliance with this term will be provided at no additional charge.

26) Safety measures. Contractor shall take all reasonable precautions for the safety of employees on the worksite and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Contractor shall post warning signs against all hazards created by its operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.

27) Smoking. Persons working under the Contract shall adhere to local smoking policies. Smoking will only be permitted in posted areas or off premises.

28) Stored materials. Upon prior written agreement between the Contractor and Region 4 ESC, payment may be made for materials not incorporated in the work but delivered and suitably stored at the site or some other location, for installation at a later date. An inventory of the stored materials must be provided to Region 4 ESC prior to payment. Such materials must be stored and protected in a secure location and be insured for their full value by the Contractor against loss and damage. Contractor agrees to provide proof of coverage and additionally insured upon request. Additionally, if stored offsite, the materials must also be clearly identified as property of Region 4 ESC and be separated from other materials. Region 4 ESC must be allowed reasonable opportunity to inspect and take inventory of stored materials, on or offsite, as necessary. Until final acceptance by Region 4 ESC, it shall be the Contractor's responsibility to protect all materials and equipment. Contractor warrants and guarantees that title for all work, materials and equipment shall pass to Region 4 ESC upon final acceptance.

29) Funding Out Clause. A Contract for the acquisition, including lease, of real or personal property is a commitment of Region 4 ESC's current revenue only. Region 4 ESC retains the right to terminate the Contract at the expiration of each budget period during the term of the Contract and is conditioned on a best effort attempt by Region 4 ESC to obtain appropriate funds for payment of the contract.

30) Indemnity. Contractor shall protect, indemnify, and hold harmless both Region 4 ESC and its administrators, employees and agents against all claims, damages, losses and expenses arising out of or resulting from the actions of the Contractor, Contractor employees or subcontractors in the preparation of the solicitation and the later execution of the Contract. Any litigation involving either Region 4 ESC, its administrators and employees and agents will be in Harris County, Texas.

31) Marketing. Contractor agrees to allow Region 4 ESC to use their name and logo within website, marketing materials and advertisement. Any use of Region 4 ESC name and logo or any form of publicity, inclusive of press releases, regarding this Contract by Contractor must have prior approval from Region 4 ESC.

32) Certificates of Insurance. Certificates of insurance shall be delivered to the Region 4 ESC prior to commencement of work. The Contractor shall give Region 4 ESC a minimum of ten (10) days' notice prior to any modifications or cancellation of policies. The Contractor shall require all subcontractors performing any work to maintain coverage as specified.

33) Legal Obligations. It is Contractor's responsibility to be aware of and comply with all local, state, and federal laws governing the sale of products/services and shall comply with all laws

while fulfilling the Contract. Applicable laws and regulation must be followed even if not specifically identified herein.

34) Tariff Surcharges: Contractor has the option to charge a surcharge, as an additional line item, if approved by the purchasing agency. All surcharges must be based on a percentage of total order and must be approved by Region 4 prior to use.

OFFER AND CONTRACT SIGNATURE FORM

The undersigned hereby offers and, if awarded, agrees to furnish goods and/or services in strict compliance with the terms, specifications and conditions at the prices proposed within response unless noted in writing.

Company Name: Affordable Interior Systems, Inc. (AIS)

Address: 25 Tucker Drive

City/State/Zip: Leominster, MA 01453

Telephone No.: 978.562.7500 or toll free 800.434.7400

Email Address: bpoist@ais-inc.com

Printed Name: Bryan Poist

Title: Chief Financial Officer

Authorized signature: Bryan Poist

Accepted by Region 4 ESC:

Contract No. R191801

Initial Contract Term May 1, 2020 to April 30, 2023

Margaret S. Bass
Region 4 ESC Authorized Board Member

4/28/2020
Date

Margaret S. Bass
Print Name

Carmen T. Moreno
Region 4 ESC Authorized Board Member

4/28/2020
Date

Carmen T. Moreno
Print Name

Appendix B

TERMS & CONDITIONS ACCEPTANCE FORM

Signature on the Offer and Contract Signature form certifies complete acceptance of the terms and conditions in this solicitation and draft Contract except as noted below with proposed substitute language (additional pages may be attached, if necessary). The provisions of the RFP cannot be modified without the express written approval of Region 4 ESC. If a proposal is returned with modifications to the draft Contract provisions that are not expressly approved in writing by Region 4 ESC, the Contract provisions contained in the RFP shall prevail.

Check one of the following responses:

☐ Offeror takes no exceptions to the terms and conditions of the RFP and draft Contract.

(*Note: If none are listed below, it is understood that no exceptions/deviations are taken.)*

☒ Offeror takes the following exceptions to the RFP and draft Contract. All exceptions must be clearly explained, reference the corresponding term to which Offeror is taking exception and clearly state any proposed modified language, proposed additional terms to the RFP and draft Contract must be included:

(*Note: Unacceptable exceptions may remove Offeror's proposal from consideration for award. Region 4 ESC shall be the sole judge on the acceptance of exceptions and modifications and the decision shall be final.*

If an offer is made with modifications to the contract provisions that are not expressly approved in writing, the contract provisions contained in the RFP shall prevail.)

Section/Page	Term, Condition, or Specification	Exception/Proposed Modification	Accepted (For Region 4 ESC's use)
Appendix A, #14 Page 4	Delivery. Conforming product shall be shipped within 7 days of receipt of Purchase Order. If delivery is not or cannot be made within this time period, the Contractor must receive authorization for the delayed delivery. The order may be canceled if the estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. Destination and shall be included in all pricing offered unless otherwise clearly stated in writing.	Delivery. Conforming product shall be shipped ~~within 7 days of receipt of Purchase Order~~ within the timeframe mutually agreed to by the Vendor and the purchasing agency. If delivery is not or cannot be made within this time period, the Contractor must receive authorization for the delayed delivery. The order may be canceled if the estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. Destination and shall be included in all pricing offered unless otherwise clearly stated in writing.	Acceptable 4/28/20

Exhibit F, Federal Certifications, Page 40 of 55	CERTIFICATION OF COMPLIANCE WITH BUY AMERICA PROVISIONS To the extent purchases are made with Federal Highway Administration, Federal Railroad Administration, or Federal Transit Administration funds, offeror certifies that its products comply with all applicable provisions of the Buy America Act and agrees to provide such certification or applicable waiver with respect to specific products to any Participating Agency upon request. Purchases made in accordance with the Buy America Act must still follow the applicable procurement rules calling for free and open competition.	CERTIFICATION OF COMPLIANCE WITH BUY AMERICA PROVISIONS To the extent purchases are made with Federal Highway Administration, Federal Railroad Administration, or Federal Transit Administration funds, vendor may be requested to certify individual product compliance ~~offeror certifies that its products comply~~ with all applicable provisions of the Buy America Act. ~~and~~ Vendor agrees to provide such certification or applicable waiver with respect to specific products to any Participating Agency upon request. It is the responsibility of the Purchasing Agency to notify the Vendor that requested product(s) must adhere to the Buy America Act. Purchases made in accordance with the Buy America Act must still follow the applicable procurement rules calling for free and open competition.	Noted 4/28/20
2.2 Pricing Commitment, Page 20 of 55	**Pricing Commitment** Supplier commits the not-to-exceed pricing provided under the Master Agreement pricing is its lowest available (net to buyer) to Public Agencies nationwide and further commits that if a Participating Public Agency is eligible for lower pricing through a national, state, regional or local or cooperative contract, the Supplier will match such lower pricing to that Participating Public Agency under the Master Agreement.	**Pricing Commitment** Supplier commits the not-to-exceed pricing provided under the Master Agreement pricing is its lowest available (net to buyer) at the time the Vendor submits their proposal to Public Agencies nationwide and further commits that if a Participating Public Agency is eligible for lower pricing through a national, state, regional or local or cooperative contract, the Supplier will match such lower pricing to that Participating Public Agency under the Master Agreement. The “lowest, not-to-exceed pricing” shall be compared to other cooperative state and local contracts, buying the same product mix, for the same geographical areas, under the same terms and conditions.	

AIS

Region 4 Education Service Center (ESC)

Solicitation 19-18

Request for Proposal
for
Furniture, Installation, and Related Services

Submittal Deadline:
Wednesday, December 11, 2019
2:00pm Central Time

Affordable Interior Systems, Inc. (AIS)
25 Tucker Drive
Leominster, MA 01453

Nick Haritos
Executive Vice President of Sales & Distribution
Phone: 978.562.7500
Email: nharitos@ais-inc.com

APPENDIX A

DRAFT CONTRACT

This Contract ("Contract") is made as of _____, 2020 by and between _____ Affordable Interior Systems, Inc. (AIS) ("Contractor") and Region 4 Education Service Center ("Region 4 ESC") for the purchase of Furniture, Installation and Related Services ("the products and services").

RECITALS

WHEREAS, Region 4 ESC issued Request for Proposals Number R_____ for _____ ("RFP"), to which Contractor provided a response ("Proposal"); and

WHEREAS, Region 4 ESC selected Contractor's Proposal and wishes to engage Contractor in providing the services/materials described in the RFP and Proposal;

WHEREAS, both parties agree and understand the following pages will constitute the Contract between the Contractor and Region 4 ESC, having its principal place of business at 7145 West Tidwell Road, Houston, TX 77092.

WHEREAS, Contractor included, in writing, any required exceptions or deviations from these terms, conditions, and specifications; and it is further understood that, if agreed to by Region 4 ESC, said exceptions or deviations are incorporated into the Contract.

WHEREAS, this Contract consists of the provisions set forth below, including provisions of all attachments referenced herein. In the event of a conflict between the provisions set forth below and those contained in any attachment, the provisions set forth below shall control.

WHEREAS, the Contract will provide that any state and local governmental entities, public and private primary, secondary and higher education entities, non-profit entities, and agencies for the public benefit ("Public Agencies") may purchase products and services at prices indicated in the Contract upon the Public Agency's registration with OMNIA Partners.

1) Term of agreement. The term of the Contract is for a period of three (3) years unless terminated, canceled or extended as otherwise provided herein. Region 4 ESC shall have the right to renew the Contract for two (2) additional one-year periods or portions thereof. Region 4 ESC shall review the Contract prior to the renewal date and notify the Contractor of Region 4 ESC's intent renew the Contract. Contractor may elect not to renew by providing three hundred sixty-five days' (365) notice to Region 4 ESC. Notwithstanding the expiration of the initial term or any subsequent term or all renewal options, Region 4 ESC and Contractor may mutually agree to extend the term of this Agreement. Contractor acknowledges and understands Region 4 ESC is under no obligation whatsoever to extend the term of this Agreement.

2) Scope: Contractor shall perform all duties, responsibilities and obligations, set forth in this agreement, and described in the RFP, incorporated herein by reference as though fully set forth herein.

3) Form of Contract. The form of Contract shall be the RFP, the Offeror's proposal and Best and Final Offer(s).

4) Order of Precedence. In the event of a conflict in the provisions of the Contract as accepted by Region 4 ESC, the following order of precedence shall prevail:

   i. This Contract
   ii. Offeror's Best and Final Offer
   iii. Offeror's proposal
   iv. RFP and any addenda

5) Commencement of Work. The Contractor is cautioned not to commence any billable work or provide any material or service under this Contract until Contractor receives a purchase order for such work or is otherwise directed to do so in writing by Region 4 ESC.

6) Entire Agreement (Parol evidence). The Contract, as specified above, represents the final written expression of agreement. All agreements are contained herein and no other agreements or representations that materially alter it are acceptable.

7) Assignment of Contract. No assignment of Contract may be made without the prior written approval of Region 4 ESC. Contractor is required to notify Region 4 ESC when any material change in operations is made (i.e. bankruptcy, change of ownership, merger, etc.).

8) Novation. If Contractor sells or transfers all assets or the entire portion of the assets used to perform this Contract, a successor in interest must guarantee to perform all obligations under this Contract. Region 4 ESC reserves the right to accept or reject any new party. A change of name agreement will not change the contractual obligations of Contractor.

9) Contract Alterations. No alterations to the terms of this Contract shall be valid or binding unless authorized and signed by Region 4 ESC.

10) Adding Authorized Distributors/Dealers. Contractor is prohibited from authorizing additional distributors or dealers, other than those identified at the time of submitting their proposal, to sell under the Contract without notification and prior written approval from Region 4 ESC. Contractor must notify Region 4 ESC each time it wishes to add an authorized distributor or dealer. Purchase orders and payment can only be made to the Contractor unless otherwise approved by Region 4 ESC. Pricing provided to members by added distributors or dealers must also be less than or equal to the Contractor's pricing.

11) TERMINATION OF CONTRACT

   a) Cancellation for Non-Performance or Contractor Deficiency. Region 4 ESC may terminate the Contract if purchase volume is determined to be low volume in any 12-month period. Region 4 ESC reserves the right to cancel the whole or any part of this Contract due to failure by Contractor to carry out any obligation, term or condition of the contract. Region 4 ESC may issue a written deficiency notice to Contractor for acting or failing to act in any of the following:

      i. Providing material that does not meet the specifications of the Contract;
      ii. Providing work or material was not awarded under the Contract;
      iii. Failing to adequately perform the services set forth in the scope of work and specifications;

iv. Failing to complete required work or furnish required materials within a reasonable amount of time;
v. Failing to make progress in performance of the Contract or giving Region 4 ESC reason to believe Contractor will not or cannot perform the requirements of the Contract; or
vi. Performing work or providing services under the Contract prior to receiving an authorized purchase order.

Upon receipt of a written deficiency notice, Contractor shall have ten (10) days to provide a satisfactory response to Region 4 ESC. Failure to adequately address all issues of concern may result in Contract cancellation. Upon cancellation under this paragraph, all goods, materials, work, documents, data and reports prepared by Contractor under the Contract shall immediately become the property of Region 4 ESC.

b) Termination for Cause. If, for any reason, Contractor fails to fulfill its obligation in a timely manner, or Contractor violates any of the covenants, agreements, or stipulations of this Contract Region 4 ESC reserves the right to terminate the Contract immediately and pursue all other applicable remedies afforded by law. Such termination shall be effective by delivery of notice, to the Contractor, specifying the effective date of termination. In such event, all documents, data, studies, surveys, drawings, maps, models and reports prepared by Contractor will become the property of the Region 4 ESC. If such event does occur, Contractor will be entitled to receive just and equitable compensation for the satisfactory work completed on such documents.

c) Delivery/Service Failures. Failure to deliver goods or services within the time specified, or within a reasonable time period as interpreted by the purchasing agent or failure to make replacements or corrections of rejected articles/services when so requested shall constitute grounds for the Contract to be terminated. In the event Region 4 ESC must purchase in an open market, Contractor agrees to reimburse Region 4 ESC, within a reasonable time period, for all expenses incurred.

   i) Additional Delivery/Installation Charges: Contractor may enter into additional negotiations with a purchasing agency for additional delivery or installation charges based on onerous conditions. Additional delivery and/or installation charges may only be charged if mutually agreed upon by the purchasing agency and Contractor and can only be charged on a per individual project basis.

d) Force Majeure. If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil or military authority; insurrections; riots; epidemics; landslides; lighting; earthquake; fires; hurricanes; storms; floods; washouts; droughts; arrests; restraint of government and people; civil disturbances; explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the party having the difficulty, and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of the opposing party or parties when such settlement is unfavorable in the judgment of the party having the difficulty.

e) Standard Cancellation. Region 4 ESC may cancel this Contract in whole or in part by providing written notice. The cancellation will take effect 30 business days after the other party receives the notice of cancellation. After the 30th business day all work will cease following completion of final purchase order.

12) Licenses. Contractor shall maintain in current status all federal, state and local licenses, bonds and permits required for the operation of the business conducted by Contractor. Contractor shall remain fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of services under the Contract. Region 4 ESC reserves the right to stop work and/or cancel the Contract if Contractor's license(s) expire, lapse, are suspended or terminated.

13) Survival Clause. All applicable software license agreements, warranties or service agreements that are entered into between Contractor and Region 4 ESC under the terms and conditions of the Contract shall survive the expiration or termination of the Contract. All Purchase Orders issued and accepted by Contractor shall survive expiration or termination of the Contract.

14) Delivery. Conforming product shall be shipped within 7 days of receipt of Purchase Order. If delivery is not or cannot be made within this time period, the Contractor must receive authorization for the delayed delivery. The order may be canceled if the estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. Destination and shall be included in all pricing offered unless otherwise clearly stated in writing.

15) Inspection & Acceptance. If defective or incorrect material is delivered, Region 4 ESC may make the determination to return the material to the Contractor at no cost to Region 4 ESC. The Contractor agrees to pay all shipping costs for the return shipment. Contractor shall be responsible for arranging the return of the defective or incorrect material.

16) Payments. Payment shall be made after satisfactory performance, in accordance with all provisions thereof, and upon receipt of a properly completed invoice.

17) Price Adjustments. Should it become necessary or proper during the term of this Contract to make any change in design or any alterations that will increase price, Region 4 ESC must be notified immediately. Price increases must be approved by Region 4 ESC and no payment for additional materials or services, beyond the amount stipulated in the Contract shall be paid without prior approval. All price increases must be supported by manufacturer documentation, or a formal cost justification letter. Contractor must honor previous prices for thirty (30) days after approval and written notification from Region 4 ESC. It is the Contractor's responsibility to keep all pricing up to date and on file with Region 4 ESC. All price changes must be provided to Region 4 ESC, using the same format as was provided and accepted in the Contractor's proposal.

Price reductions may be offered at any time during Contract. Special, time-limited reductions are permissible under the following conditions: 1) reduction is available to all users equally; 2) reduction is for a specific period, normally not less than thirty (30) days; and 3) original price is not exceeded after the time-limit. Contractor shall offer Region 4 ESC any published price reduction during the Contract term.

18) Audit Rights. Contractor shall, at its sole expense, maintain appropriate due diligence of all purchases made by Region 4 ESC and any entity that utilizes this Contract. Region 4 ESC reserves the right to audit the accounting for a period of three (3) years from the time such

purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective date of termination. Region 4 ESC shall have the authority to conduct random audits of Contractor's pricing at Region 4 ESC's sole cost and expense. Notwithstanding the foregoing, in the event that Region 4 ESC is made aware of any pricing being offered that is materially inconsistent with the pricing under this agreement, Region 4 ESC shall have the ability to conduct an extensive audit of Contractor's pricing at Contractor's sole cost and expense. Region 4 ESC may conduct the audit internally or may engage a third-party auditing firm. In the event of an audit, the requested materials shall be provided in the format and at the location designated by Region 4 ESC.

19) Discontinued Products. If a product or model is discontinued by the manufacturer, Contractor may substitute a new product or model if the replacement product meets or exceeds the specifications and performance of the discontinued model and if the discount is the same or greater than the discontinued model.

20) New Products/Services. New products and/or services that meet the scope of work may be added to the Contract. Pricing shall be equivalent to the percentage discount for other products. Contractor may replace or add product lines if the line is replacing or supplementing products, is equal or superior to the original products, is discounted similarly or greater than the original discount, and if the products meet the requirements of the Contract. No products and/or services may be added to avoid competitive procurement requirements. Region 4 ESC may require additions to be submitted with documentation from Members demonstrating an interest in, or a potential requirement for, the new product or service. Region 4 ESC may reject any additions without cause.

21) Options. Optional equipment for products under Contract may be added to the Contract at the time they become available under the following conditions: 1) the option is priced at a discount similar to other options; 2) the option is an enhancement to the unit that improves performance or reliability.

22) Warranty Conditions. All supplies, equipment and services shall include manufacturer's minimum standard warranty and one (1) year labor warranty unless otherwise agreed to in writing.

23) Site Cleanup. Contractor shall clean up and remove all debris and rubbish resulting from their work as required or directed. Upon completion of the work, the premises shall be left in good repair and an orderly, neat, clean, safe and unobstructed condition.

24) Site Preparation. Contractor shall not begin a project for which the site has not been prepared, unless Contractor does the preparation work at no cost, or until Region 4 ESC includes the cost of site preparation in a purchase order. Site preparation includes, but is not limited to: moving furniture, installing wiring for networks or power, and similar pre-installation requirements.

25) Registered Sex Offender Restrictions. For work to be performed at schools, Contractor agrees no employee or employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are or are reasonably expected to be present. Contractor agrees a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at Region 4 ESC's discretion. Contractor must identify any additional costs associated with compliance of this

term. If no costs are specified, compliance with this term will be provided at no additional charge.

26) Safety measures. Contractor shall take all reasonable precautions for the safety of employees on the worksite and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Contractor shall post warning signs against all hazards created by its operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.

27) Smoking. Persons working under the Contract shall adhere to local smoking policies. Smoking will only be permitted in posted areas or off premises.

28) Stored materials. Upon prior written agreement between the Contractor and Region 4 ESC, payment may be made for materials not incorporated in the work but delivered and suitably stored at the site or some other location, for installation at a later date. An inventory of the stored materials must be provided to Region 4 ESC prior to payment. Such materials must be stored and protected in a secure location and be insured for their full value by the Contractor against loss and damage. Contractor agrees to provide proof of coverage and additionally insured upon request. Additionally, if stored offsite, the materials must also be clearly identified as property of Region 4 ESC and be separated from other materials. Region 4 ESC must be allowed reasonable opportunity to inspect and take inventory of stored materials, on or offsite, as necessary. Until final acceptance by Region 4 ESC, it shall be the Contractor's responsibility to protect all materials and equipment. Contractor warrants and guarantees that title for all work, materials and equipment shall pass to Region 4 ESC upon final acceptance.

29) Funding Out Clause. A Contract for the acquisition, including lease, of real or personal property is a commitment of Region 4 ESC's current revenue only. Region 4 ESC retains the right to terminate the Contract at the expiration of each budget period during the term of the Contract and is conditioned on a best effort attempt by Region 4 ESC to obtain appropriate funds for payment of the contract.

30) Indemnity. Contractor shall protect, indemnify, and hold harmless both Region 4 ESC and its administrators, employees and agents against all claims, damages, losses and expenses arising out of or resulting from the actions of the Contractor, Contractor employees or subcontractors in the preparation of the solicitation and the later execution of the Contract. Any litigation involving either Region 4 ESC, its administrators and employees and agents will be in Harris County, Texas.

31) Marketing. Contractor agrees to allow Region 4 ESC to use their name and logo within website, marketing materials and advertisement. Any use of Region 4 ESC name and logo or any form of publicity, inclusive of press releases, regarding this Contract by Contractor must have prior approval from Region 4 ESC.

32) Certificates of Insurance. Certificates of insurance shall be delivered to the Region 4 ESC prior to commencement of work. The Contractor shall give Region 4 ESC a minimum of ten (10) days' notice prior to any modifications or cancellation of policies. The Contractor shall require all subcontractors performing any work to maintain coverage as specified.

33) Legal Obligations. It is Contractor's responsibility to be aware of and comply with all local, state, and federal laws governing the sale of products/services and shall comply with all laws

while fulfilling the Contract. Applicable laws and regulation must be followed even if not specifically identified herein.

34) Tariff Surcharges: Contractor has the option to charge a surcharge, as an additional line item, if approved by the purchasing agency. All surcharges must be based on a percentage of total order and must be approved by Region 4 prior to use.

OFFER AND CONTRACT SIGNATURE FORM

The undersigned hereby offers and, if awarded, agrees to furnish goods and/or services in strict compliance with the terms, specifications and conditions at the prices proposed within response unless noted in writing.

Company Name: Affordable Interior Systems, Inc. (AIS)

Address: 25 Tucker Drive

City/State/Zip: Leominster, MA 01453

Telephone No.: 978.562.7500 or toll free 800.434.7400

Email Address: bpoist@ais-inc.com

Printed Name: Bryan Poist

Title: Chief Financial Officer

Authorized signature: 

Accepted by Region 4 ESC:

Contract No. _____

Initial Contract Term _____ to _____

_____ _____

Region 4 ESC Authorized Board Member Date

_____

Print Name

_____ _____

Region 4 ESC Authorized Board Member Date

_____

Print Name

IV. EVALUATION PROCESS AND CRITERIA

1. A committee will review and evaluate all responses and make a recommendation for award of Contract(s). The recommendation for Contract awards will be based on the predetermined criteria factors outlined in this section, where each factor is assigned a point value based on its importance. In evaluating the responses, the following predetermined criteria is considered:

   a) Products/Pricing (40 Points)
   b) Performance Capability (30 Points)
   c) Qualification and Experience (20 Points)
   d) Value Add (10 Points)

2. Offeror's proposal should, at a minimum, include the following for Region 4 ESC's evaluation:
   a) Products/Services/Pricing

   i. Offerors shall provide pricing based on a discount from a manufacturer's price list or catalog, or fixed price, or a combination of both with indefinite quantities. Prices listed will be used to establish the extent of a manufacturer's product lines, services, warranties, etc. that are available from Offeror and the pricing per item. Multiple percentage discounts are acceptable if, where different percentage discounts apply, those different percentages are specified. Additional pricing and/or discounts may be included. Products and services proposed are to be priced separately with all ineligible items identified. Offerors may elect to limit their proposals to any category or categories.

Proposed Discounts

Systems, Beam/Benching, Casegoods, Tables & Universal	
Matrix, Divi, MWall, AO2, Day-to-Day PowerBeam, Oxygen, Aloft, Calibrate Casegoods, Day-to-Day and Calibrate Conference Tables, Support, Storage &Screens, Worksurfaces and Accessories	
List Price	**Discount**
$1 - $30,000	74.50%
$30,001 - $300,000	79%
$300,001 - $500,000	81%

Seating	
Bolton, Devens, Element, Granite, Natick, Upton, Paxton, Pierce, Rutland, Stow, Sulli, Triad, Trix, LB Lounge and Volker Cube	
List Price	**Discount**
$ 1 +	63.00%

ii. Include an electronic copy of the catalog from which discount, or fixed price, is calculated. Electronic price lists must contain the following: *(if applicable)*

- Manufacturer part #
- Offeror's Part # (if different from manufacturer part #)
- Description
- Manufacturers Suggested List Price and Net Price
- Net price to Region 4 ESC (including freight)

Media submitted for price list must include the Offerors' company name, name of the solicitation, and date on a Flash Drive (i.e. Pin or Jump Drives).
All AIS price lists have been provided on a USB.

iii. Is pricing available for all products and services?

Yes.

i. Please provide pricing for services based on a range, from minimum price per hour to maximum price per hour, with a not to exceed on the maximum price per hour charge.

a. Design: $65/hour (not to exceed)
b. Project Management: $85/hour (not to exceed)
c. Installation: Negotiable by project scope

iv. Describe any shipping charges.

AIS products include freight to all locations within the United States including Alaska and Hawaii.

i. Describe delivery charges along with definitions for:

1. Dock Delivery:

Included in pricing and executed by a variety of furniture freight carriers.

2. Inside Delivery:

Inside delivery for casegoods and seating will be quoted on an individual basis by our servicing dealer partners. This cost varies due to a variety of circumstances including (not limited to): Access to loading dock and freight elevator, normal hours due to OT or weekend, Union vs. nonunion and metro location vs. suburbs.

3. Deliver and Install:

Installation will be quoted on a per project basis and is subject to the same variations as inside delivery. areas.

It is in the best interest of Region 4 ESC, OMNIA and its partners to pursue “per project” quotes on installation as one “set price” nationwide would undoubtedly result in some excess charges that can be avoided by taking all aspects of project specifics into consideration.

v. Provide pricing for warranties on all products and services.

All products are covered under AIS’s Limited Lifetime Warranty. This Warranty is given to the initial purchaser and is valid for as long as the product is owned by the original Buyer. The warranty, which runs from the date of manufacture, covers defects in materials and craftsmanship found during normal usage of the products during the warranty period. If a product is defective, and if written notice of the defect is given to AIS within the applicable warranty period, AIS (at its option) will either repair or replace the defective product with a comparable component or product. The limited lifetime warranty applies to all products regardless of the number of shifts the product is used each day except as noted below.

Applicable Warranty Period	Products / Restrictions
Lifetime (as defined below)	All AIS branded products (except as noted below)
Ten (10) Years Ten (10) Years - 24/7 Shift	Electrical products AIS Seating (frames and control mechanisms) Calibrate Series Devens Seating
Five (5) Years	Moving parts, which include keyboard mechanisms, locks, suspensions, casters as well as AIS fabrics, upholsteries and mesh. AIS Seating (pneumatic cylinders, casters, glides, bases and arms, mesh and seating upholsteries, Granite and Sulli seating*)

This warranty does not apply to normal wear and tear damage caused by carrier, damage caused by transport of product from one site location to another, alterations to the product not expressly authorized by Seller, and products considered to be of a consumable nature such as bulbs and light ballast. AIS Seating normal use as defined under this warranty is the wear and tear that occurs during a 40 hour week when the product is used by a person weighing 300 pounds or less. *Granite is warranted for five years and rates for a person weighing 250 pounds or less. Sulli is warranted for five years and rates for a person weighing 300 pounds or less. AIS will not warrant any altered components or parts.

This warranty shall not cover labor or delivery charges and does not apply to items subjected to abuse, misuse, neglect, alteration, damage cause by shipment, storage, accident, fire, flood or act of God. The limited warranty is the sole remedy for product defect and no other expressed or implied warranty is provided, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. AIS shall not be liable for consequential or incidental damages arising from any product defect. A customer's exclusive remedy with respect to any and all losses or damages resulting from any cause whatsoever shall be repaired or replaced as specified above.

It also does not apply to customer's own material (COM - i.e. material specified by Buyer that is not a standard AIS product offering) used in the manufacture of AIS products. Special Products that are not offered in the AIS standard price list will have a warranty of one year. A product will not be considered defective and Seller will not be obligated to replace it, if the product is not installed properly or is used in a "non-

standard" fashion as prescribed by AIS. It is at the sole discretion of AIS to make a determination if a defect is due to improper product installation.

THIS LIMITED WARRANTY IS THE SOLE REMEDY FOR PRODUCT DEFECT AND NO OTHER EXPRESS OR IMPLIED WARRANTY IS PROVIDED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. AIS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES.

vi. Describe any return and restocking fees.

AIS understands that from time to time changes may be required on orders; however, as all AIS products are produced custom for each order, changes and cancellation costs will be assessed based on the following schedule. Review your acknowledgement thoroughly. All dates below are from time of acknowledgement.

- No fee for orders changed or canceled within one day (24 hours)
- A fee of 50% of the net pretax total of affected product if order is changed or canceled within two days (48 hours).
- A fee of 100% of the net pretax total of affected product if order is changed or canceled after two days (48 days).
- A fee of 100% of the net pretax total of all product on Rush Orders or orders with custom product if changed or canceled after 24 hours.

Any non-standard worksurface sizes, panels, fabrics, laminates, paint colors, or product modifications are considered custom.

Important: Changing a product size to another size is considered a "cancellation" of one product for another an falls under the above program.

vii. Describe any additional discounts or rebates available. Additional discounts or rebates may be offered for large quantity orders, single ship to location, growth, annual spend, guaranteed quantity, etc.

Large quantity orders will always be considered for additional discounting based on product category. AIS would welcome the negotiate a "growth incentive" after year one of the contract is complete and we have complete data to assess appropriate rebate structure.

Tiered volume discounts will be offered per the below. Any quote/order over our maximum order level (MOL) of $500,000 list (not net), will be negotiable.

viii. Describe how customers verify they are receiving Contract pricing.

Customers have several options to verify they are receiving contract pricing. AIS will post all published discounts from list price. Each authorized servicing dealer will be required to both list and net sell prices to the customer.

Other methods to verify contract pricing are:
1. Via the custom-built dedicated website to Region 4 ESC/OMNIA customers
2. Through our robust dealer network of over 1000 dealers
3. Contacting an AIS representative

ix. Describe payment methods offered.

ACH/EFT, check, wire and credit cards: Amex, Visa and Mastercard

x. Propose the frequency of updates to the Offeror's pricing structure. Describe any proposed indices to guide price adjustments. If offering a catalog contract with discounts by category, while changes in individual pricing may change, the category discounts should not change over the term of the Contract.

AIS regularly reviews its costs and seeks to always remain competitive in the marketplace, offering customers the very best value. Typically list prices will adjust annually based on material, labor and transportation costs. These increases are typically 0-3%. The discounts that are proposed will stay in place through the duration of the contract.

AIS uses the Price Producer Index (PPI) to gauge fluctuations in raw materials obtained from suppliers. The tiered volume discount structure for this contract will remain the same throughout the duration of the contract period, but we may request to adjust our list prices. Should a need to adjust our list pricing, we will submit PPI data to support our request to adjust list prices.

The US Government has imposed tariffs in recent years that has forced us to apply a minimal tariff fee on commercial orders. Currently, AIS does not apply these tariff fees to contract orders. Should we experience a major economic worldwide situation, we may request to implement a nominal fee to cover fees imposed by the Government.

xi. Describe how future product introductions will be priced and align with Contract pricing proposed.

AIS was built on ingenuity and we have the same panel systems today that launched the success of our company 30 years ago. We are continuously examining existing legacy product to make improvements for the office environments of today. Many of our furniture designs are universal and can be used with all product lines. We are dedicated to providing our customers with the best in furniture solutions that meet the client's interior needs now and for years to

come. AIS has a written non-obsolescence policy that assures a continual bridge from legacy systems to new systems.

New product introductions will be priced at current market value and the same tiered volume discount structure.

Consideration should be taken for the ability to reconfigure existing product by using updated products and universal parts. AIS products are easily reconfigurable and can incorporate new product introductions. This saves money on purchasing completely new office furniture. Our dealers can take the existing inventory and re-design it with selected new products that allow it to meet the current mission requirements.

xii. Provide any additional information relevant to this section.

A differentiating variable that benefits the customer compared to our competitors is our MOL for systems, casegoods and tables being $500,000. AIS will extend deeper discounting for quotes/orders over $500,000 list.

Not to Exceed Pricing. Region 4 ESC requests pricing be submitted as not to exceed pricing. Unlike fixed pricing, the Contractor can adjust submitted pricing lower if needed but, cannot exceed original pricing submitted. Contractor must allow for lower pricing to be available for similar product and service purchases. Cost plus pricing as a primary pricing structure is not acceptable.

b) Performance Capability

i. Include a detailed response to Appendix D, Exhibit A, OMNIA Partners Response for National Cooperative Contract. Responses should highlight experience, demonstrate a strong national presence, describe how Offeror will educate its national sales force about the Contract, describe how products and services will be distributed nationwide, include a plan for marketing the products and services nationwide, and describe how volume will be tracked and reported to OMNIA Partners.

Included with Tab 3 behind OMNIA App. D, Ex. A tab.

ii. The successful Offeror will be required to sign Appendix D, Exhibit B, OMNIA Partners Administration Agreement prior to Contract award. Offerors should have any reviews required to sign the document prior to submitting a response. Offeror's response should include any proposed exceptions to OMNIA Partners Administration Agreement on Appendix B, Terms and Conditions Acceptance Form.

Included with Tab 3 behind OMNIA App. D, Ex. B tab.

iii. Include completed Appendix D, Exhibits F. Federal Funds Certifications and G. New Jersey Business Compliance.

Included with Tab 3 behind OMNIA App. D, Ex. F & G tab.

iv. Describe how Offeror responds to emergency orders.

One of the advantages AIS has over its competition is its lead times. AIS offers the best lead times in the industry and 75% of our products ship in two (2) weeks or less. If successful as a vendor partner, we will provide key internal contacts form our customer service and project management teams that can expedite emergency orders. If all the components of the emergency order are stock items, we can typically respond in less than two (2) weeks or even shorter depending on the products specified.

v. What is Offeror's average Fill Rate?

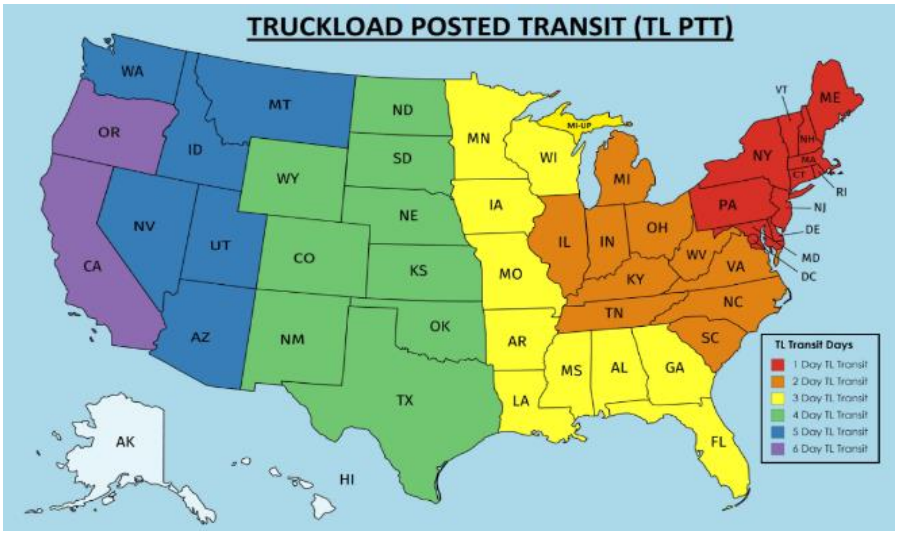
Our commitment to our customers comes through and sets AIS apart. From the range of products we offer to meet today's needs to our service levels across the company, we have an ever-present urgency to meet your schedules and respond promptly. And our focus remains constant on lean practices and doing the core elements well.

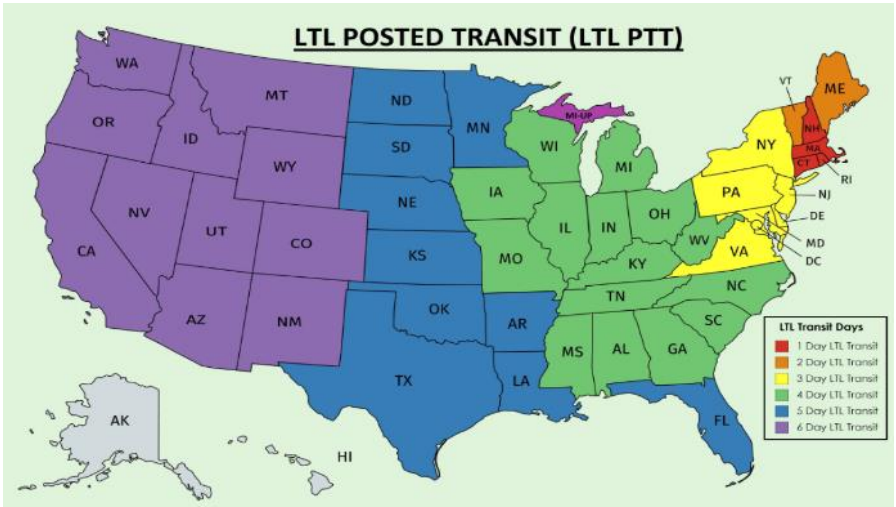
Average Fill Rates:
2017 - 98.2%
2018 - 98.6%
2019 - 99.1%

vi. What is Offeror's average on time delivery rate? Describe Offeror's history of meeting the shipping and delivery timelines.

AIS's commitment to lean manufacturing has fine-tuned our ability to have the fastest lead times in the industry. We continue to invest in efficient technologies and processes. AIS hand selects suppliers who share the AIS vision and are able to deliver materials in a matter of days. All of these factors combined allow AIS to have the flexibility to offer ten-day quick ship programs.

Currently AIS's average on-time delivery rate is 99.2%. As a Shingo Prize winner for Operational Excellence, AIS continues to monitor every metric from order entry to manufacturing to shipping to continually improve efficiencies developed by our own expert teams. AIS uses a combination of Full Truckloads and Consolidated Truckloads to guarantee "meet or beat" delivery dates. Shipping rates are continually measured not only for on-time delivery but for quality, safety, sustainability and value.





vii. Describe Offeror's return and restocking policy.

AIS understands that from time to time changes may be required on orders; however, as all AIS products are produced custom for each order, changes and cancellation costs will be assessed based on the following schedule. Review your acknowledgement thoroughly. All dates below are from time of acknowledgement.

- No fee for orders changed or canceled within one day (24 hours)
- A fee of 50% of the net pretax total of affected product if order is changed or canceled within two days (48 hours).
- A fee of 100% of the net pretax total of affected product if order is changed or canceled after two days (48 hours).
- A fee of 100% of the net pretax total of all product on Rush Orders or orders with custom product if changed or canceled after 24 hours.

Any non-standard worksurface sizes, panels, fabrics, laminates, paint colors, or product modifications are considered custom.

Important: Changing a product size to another size is considered a "cancellation" of one product for another an falls under the above program.

viii. Describe Offeror's ability to meet service and warranty needs.

From the beginning of a project, our teams are engaged to understand needs, develop the best plans and strategies, and execute seamlessly.

Customer Service

AIS will work through the servicing dealer to provide product representation and sales support. AIS' customer service members are trained on AIS' product and design tools to assist the customers with a complete support system.

Orders can be accepted as email, fax or electronic order entry.

AIS ensures that its superior customer service representative (CSR) will acknowledge all inquiries within one business day. Most inquiries will be resolved within 24 hours, however AIS customer service will advise a daily update on each inquiry until the inquiry is answered.

AIS tracks all quality issues within a database for trend analysis to identify the root cause and eliminate the error. AIS has an entire quality control department focused on customer feedback. Every AIS order is 100% digitally photographed prior to shipment. This action ensures all parts of the order have been included and are being shipped without defects. Photographs also provide better information for customer service as well as root causes for problems that are found in the field during installation, such as locating product within the shipment, if necessary. AIS' constant goal is to ensure the satisfaction of each customer.

Project Management

The AIS Project Management (PM) team monitors internal reports for orders exceeding $150,000 net, as this is the threshold that determines whether a project manager is required (unless otherwise requested by the AIS sales team).

By maintaining and shared spreadsheet, the AIS PMs track all large projects, documented from the Daily Sales Report; one AIS PM will be assigned per project and will draft a Shipping Schedule based on project details including, but not limited to:

- Product/System
- Quantity of Skids/Trucks
- Whether the project is phased
- Special delivery requirements

Once the schedule is drafted, a copy will be sent to the dealership for their review and feedback. Based on the dealership's response, any modifications necessary will be made to the shipping schedule and once approved, the schedule is forwarded to our Production and Shipping Department for application to the corresponding sales orders.

As the ship date(s) for the project approaches, the AIS PM will communicate directly with Production/Shipping regarding any important details pertinent to the project and ensure to the best of our ability that the sales order(s) ship complete according to the schedule provided.

Once the shipment has left the AIS facility, the AIS PM will communicate with the dealership or the dealer's installer with delivery details, circle sheets for receiving the product, and overall details on the project.

Once the shipment has been confirmed as received, the AIS PM will continue to work with the dealer/installer as needed to assist with any questions or concerns that may arise during the installation (product/install questions, missing/damaged items, etc.) until the project is complete.

Should any replacement items be needed to complete the installation, the AIS PM will work with the AIS Customer Service Rep (CSR), providing the necessary information so that replacement order(s) can be processed in a timely manner (part #'s, finishes, ship date, ship to, etc).

In addition to this overall process, the AIS PM team is also available for any field- or product-related questions both internal and external to AIS (CSRs, dealers, etc).

Field Services

In conjunction with the authorized dealer's representatives and installation team, AIS field services is available to assist when necessary with several quality control inspections throughout the installation process. All product is inspected as the items are being unloaded from the trucks. All items are cross checked for inventory purposes to the shipping documents as well as inspected for obvious physical damage. The items are then moved to the staging area, inspected again and staged for installation.

In addition, during the installation of the product, each item is thoroughly checked to meet standards before it is installed. After each phase of the installation is completed, there are several levels of inspection that take place. The supervisor completely walks through each workstation and verifies that the panels and work

surfaces are mounted correctly and flush, all drawers, overheads and task lights are working correctly and that all power is working.

Next, the project manager does an independent walk-through inspecting the same things. Lastly, at the end of each phase the project manager walks the customer through each station, demonstrating that everything is to their satisfaction. If at any time during the inspections there is product that needs to be replaced, the AIS is notified immediately, and the replacement product is ordered. Frequently the product is pulled from the next phase to replace the item, allowing that area to be completed without impacting the installation schedule and allowing the replacement product being ordered to be shipped for the next phase.

Specification Services

Our specification department made up of 15 designers across the United States that work from an online queue offering two main services; design checks and specification requests in which both of these services dealers can submit via our dealer portal, AIS DealerNet. AIS Design will provide specifications in CAP, GIZA or Project Matrix format. CET formats will be available in 2020.

Design checks are completed layouts that are specified with AIS products in which the authorized dealer requests our specification team to review the layout for accuracy prior to placing an order. Main items we look for in a check are related to the panels, connectors, electrical components and supports. We also offer an express check option which will be completed in 1-2 business days. What we do on an express check is review the layout, fix any errors and note any ways to reduce cost and send the layout only back (we do not provide 2D, 3D prints or run a BOM for these checks).

Specification requests are submissions in which AIS will use a typical layout, block plan or competitor layout to assist with the specification process using AIS symbols. Completed designs/specifications will be returned to dealer with the drawing file, worksheet file and a PDF which contains 2D, 3D prints and a BOM (bill of materials), the BOM's are created from the items that are specified in the drawing file, unless otherwise noted. Specification lead times can vary daily, ranging from anywhere from 2-4 business days on average.

Other design/specification services offered include:

- Rendering services – The turnaround time is typically 48 hours. The AIS team and/or rendering team are not able to create or render special symbols or other manufacture items, we can only render true AIS parts and pieces.
- Product Specification Training
- Mock-up & Showroom reviews - The AIS team will review these projects in detail and if necessary, add in any supports or parts/pieces required to be sure the AIS product is being showcased in the best way possible.
- General product & design questions can be answered by emailing the team design@ais-inc.com or contacting us via telephone 800-434-7400 during business hours M-F 8:30-5pm (EDT)

Warranty Protocol/Services



"The overall intention for AIS is to maintain an excellent customer relationship."

- Bruce Platzman, President

To provide our customers with the quality they desire, AIS designs and manufactures products to live long and useful lives. This is exemplified by a limited lifetime warranty on all systems furniture to the initial purchaser which is valid for as long as the product is owned by the original Buyer. The warranty which runs from the date of manufacture, covers defects in materials and craftsmanship found during normal usage of the products during the warranty period. Please see our product Lifetime Warranty for more information.

At AIS, we know that it can be difficult to foresee the future needs of your business. That's why our systems are designed to withstand repeated service, repair and handling for whatever the road ahead may bring. Our systems also feature standardized product parts and components, which are available to facilitate maintenance, servicing, and reassembly.

AIS offers a limited lifetime warranty on all our products.

Warranty issues are handled by our customer service department. They may be contacted directly at 800.434.7400 or through the servicing dealer. An AIS representative will be in contact within 24 hours to resolve warranty issues.

ix. Describe Offeror's customer service/problem resolution process. Include hours of operation, number of services, etc.

AIS participates in other GPO's and we have processes in place to be a long-term partner. We have a positive track record of reconciling issues quickly and faster than most.

AIS' escalation management plan will include the following chain from the authorized dealer through AIS:

- Customer Service Representative
- Manager of Customer Service
- Director of Customer Service
- OEM Contract Administrator
- Regional Vice President
- Executive Vice President
- President

The list of personnel listed above is the chain command within the organization.

AIS has a flat organizational structure, what we mean by this is that we do not need to go through each level of management to get things done. AIS is a very "get it done" type of company. Our customer service team is empowered by management to do what it takes to get things done. We also understand the urgency when a customer calls with an issue or a question. We feel that we can manage the customer's account easily within the first three tiers (Customer Service Representative, Manager of Customer Service, OEM Contract Administrator). But also know our entire team is behind the Region 4 ESC contract and ready to support the needs of all Region 4 ESC customers.

Many of AIS employees work outside of normal working hours of Monday through Friday, 8:00am – 5:00pm EDT. All employees have customer satisfaction as a driving force. Unlike other manufacturer's, AIS offers the below services.

- Dedicated Customer Service Representatives
- Project Management
- Field Services
- Design/Specifications Services

x. Describe Offeror's invoicing process. Include payment terms and acceptable methods of payments. Offerors shall describe any associated fees pertaining to credit cards/p-cards.

AIS generates an invoice at the time of shipment from our factory. Payment terms are Net 30. No fees on credit cards.

xi. Describe Offeror's contract implementation/customer transition plan.

AIS will be very aggressive in our efforts to market the Region 4 ESC award across the country. There are many channels we will employ to get the word out to all business entities in promoting the Region 4 ESC contract across the country.

Because AIS has such a vast dealer network across the country, it provides AIS a big advantage in marketing contracts such as this. Our over 1000 dealers (with an average five (5) sales reps per dealer allows for over 4,000 sales representatives nationwide) will all have boots on the ground in their marketplace actively promoting this contract to their client base.

Following AIS's standard Program Launch Plan, the executive leadership team will immediately define the messaging document and position statement for both internal stakeholders and internal and external audiences. The positioning document will include the overview of the Region 4 ESC contract and how AIS can provide workspace solutions for its customers.

Upon award, AIS will draft a co-branded press release to announce to the trade publications, including Monday Morning Quarterback, Office Insight, Business of Furniture and any other industry trade publications that may choose to publish the release. The draft announcement will be sent to Region 4 ESC partners for final approval before release.

AIS will publish the approved Region 4 ESC partnership announcement on AIS's public website and post the master agreement and contract details within the contract section of the website, to be easily accessed by dealers and Region 4 ESC partner customers, within 90 days of award.

The AIS Marketing and Contract team will create a program email announcement, social media, brochure, internal and external training presentation to share with AIS team members, dealers and Region 4 ESC partners. Upon approval from the Region 4 ESC team, these communications and materials will be released to publicly. These materials will be completed within 90 days of contract award.

AIS sales representatives and sales leaders will attend regional NIGP chapter meetings and summits in their respective regions and areas. The goal to attend these shows would be to make connections with purchasing decision makers who are involved with Region 4 ESC partners or looking for a partner supplier solution. Follow up, post event will be made by AIS team members to ensure needs are met with AIS or Region 4 ESC partners.

AIS will attend the annual NIGP Forum in Chicago, IL in August 2020. AIS's booth space will include AIS's most relevant products and will be staffed by our regional sales team. AIS will promote the NIGP Forum prior to the event to any pre-registered attendees, AIS dealers, designers and influencers. During the show, AIS will post on social media our participation and activities happening throughout the event.

Post show follow up will include communications to all show attendees. AIS representatives will receive contact information for anyone who visits the AIS booth and wishes to learn more or has an opportunity for an AIS solution. These attendees will be contacted within 48 hours after the show, if not sooner.

The AIS Marketing team will work with our creative partners and graphic design team to create advertising in appropriate trade publications, dealer network communications and social media connections.

AIS will continue to update Region 4 ESC partner brochures and program presentations with client install photos, project overviews and testimonials. We will continue to reach out to AIS dealers and Region 4 ESC partner contacts with new product and program introductions and promotions through email blasts, newsletters and social media channels.

AIS will create a website homepage accessed from www.ais-inc.com that will be co-branded for Region 4 ESC and AIS. This website will include a link to a pdf copy of the original RFP and Master Agreement and amendments. There will be links to the products offered on the Region 4 ESC agreement including brochures, price lists, idea starters, fabrics and finishes, product stylist, spaces by application, image library and specification resources. AIS's toll-free number, 800.434.7400 and contact email address, info@ais-inc.com, for Region 4 ESC will be available on this site.

Additionally, this web page will link to Region 4 ESC website and online registration page.

As far as transitioning existing public agencies to utilizing the Region 4 ESC contract, AIS must remain compliant with existing federal, state and local contracts. When applicable, AIS will make the recommendation to use the Region 4 ESC contract. We recognize the multiple benefits to utilizing the Region 4 ESC contract. AIS will position the Region 4 ESC contract with a higher incentive to authorized dealers for using the Region 4 ESC contract.

xii. Describe the financial condition of Offeror.

As a privately held company, AIS has a very strong financial position with equity over $80MM. Our current ratio is 1.4 to 1. Our 2019 sales will be over $219MM.

xiii. Provide a website link in order to review website ease of use, availability, and capabilities related to ordering, returns and reporting. Describe the website's capabilities and functionality.
www.ais-inc.com

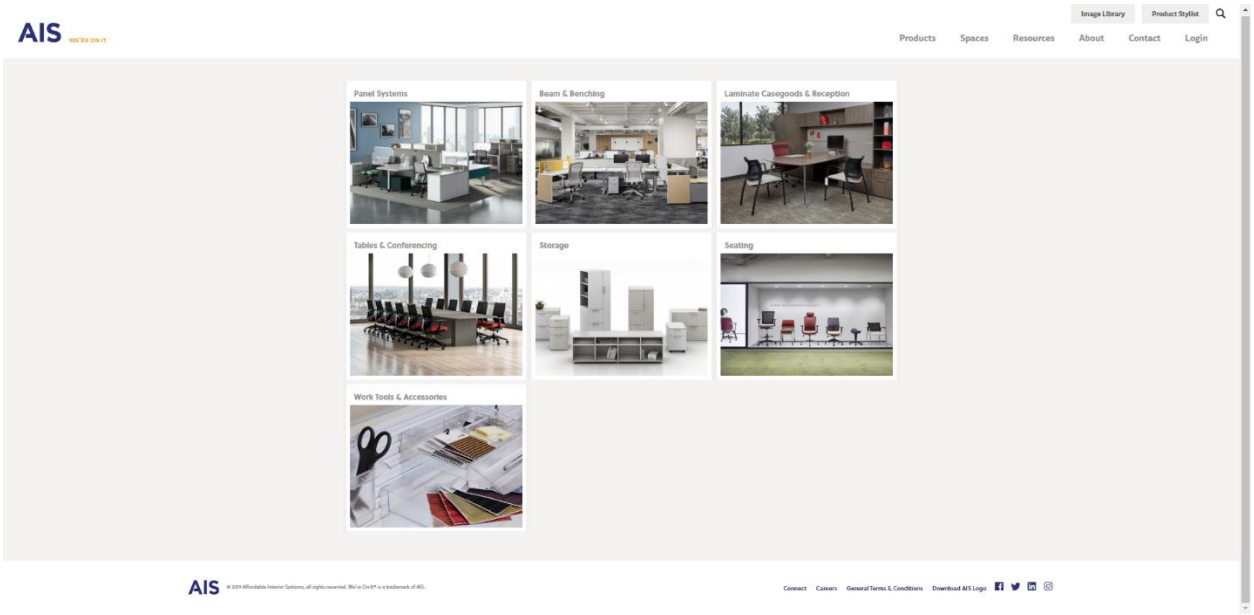
AIS will create a website homepage accessed from www.ais-inc.com that will be co-branded for Region 4 ESC and AIS.

This website will feature:

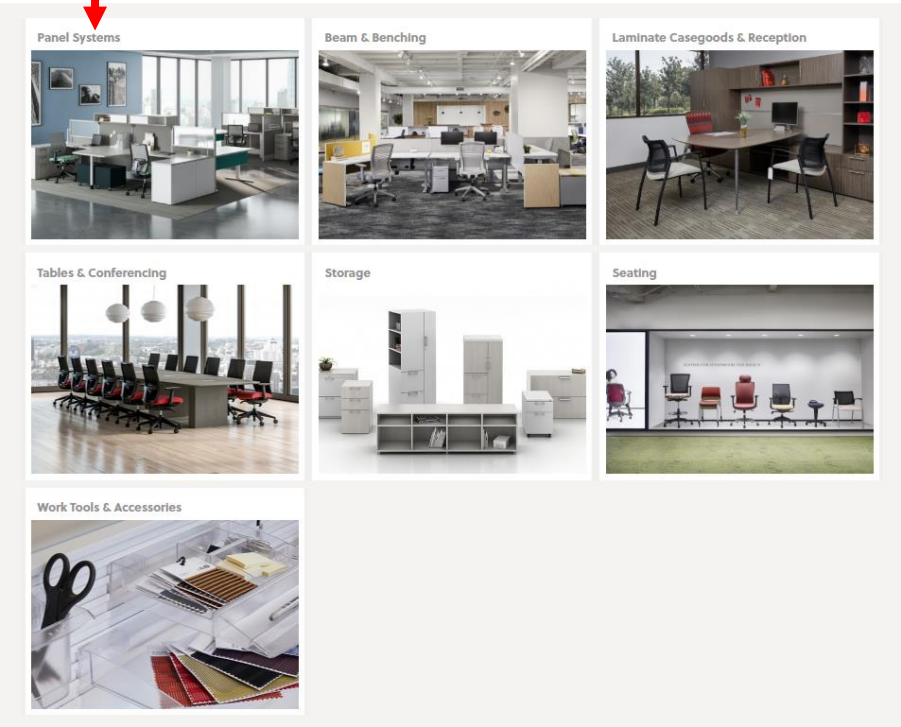
- Link to PDF copy of the original RFP and Master Agreement with amendments
- Link to Region 4 ESC website
- Product offering
- Program discounts
- Price lists to verify list pricing
- Product information
- AIS representatives list
- Search capability to find a local dealer and showrooms
- Image library with thousands of images of our products
- Idea starters
- Colors, materials, finishes to choose from for product lines
- Environmental/sustainability information
- Warranty information
- Ability to check order status
- Design resources
- Product Stylist for seating
- AIS Contact information with toll free number and contact email address

See example snapshots of website pages on following pages (not all above bullet points included).

Product Offering Page

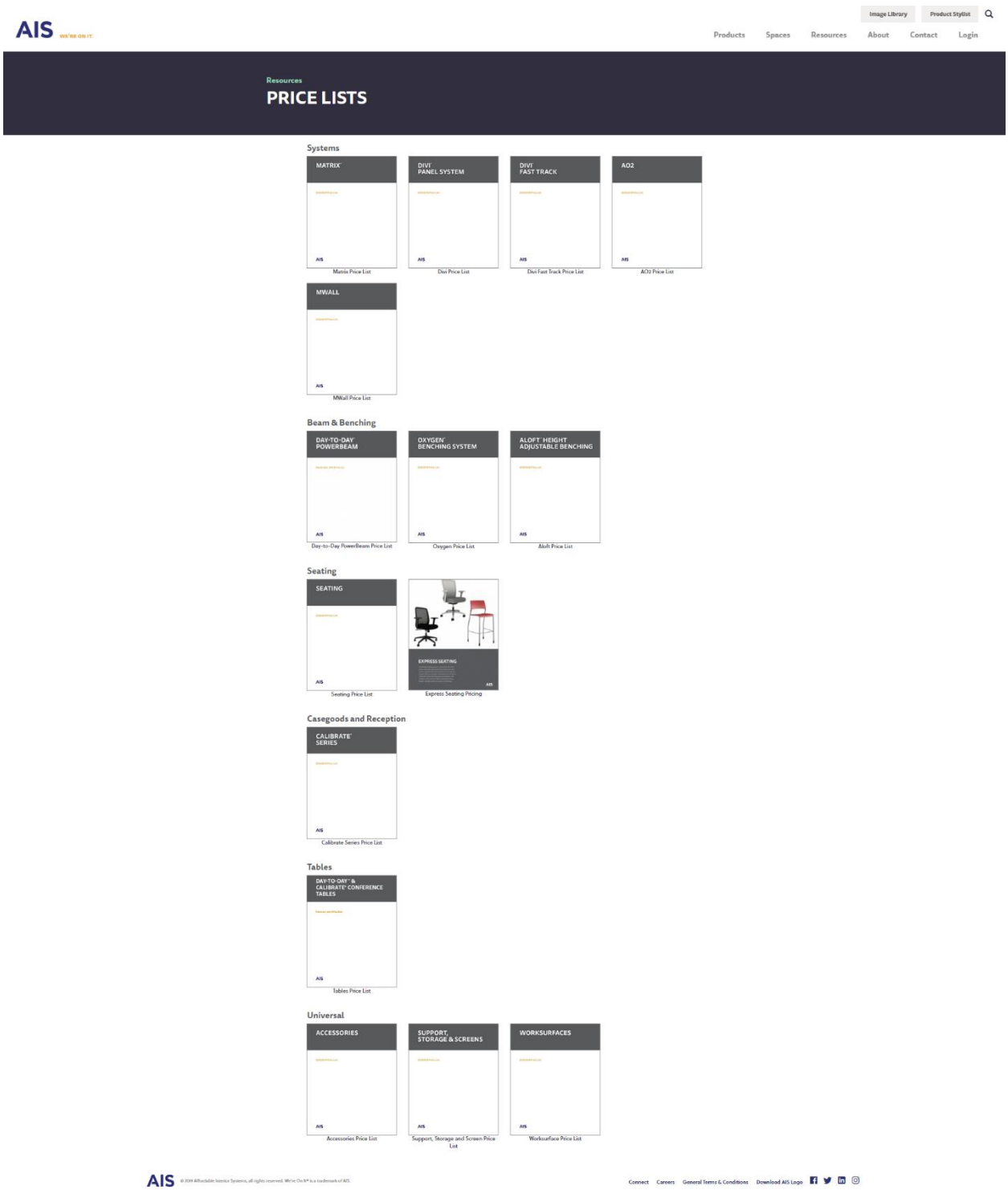


Click on the appropriate product category square to be navigated to desired product categories.

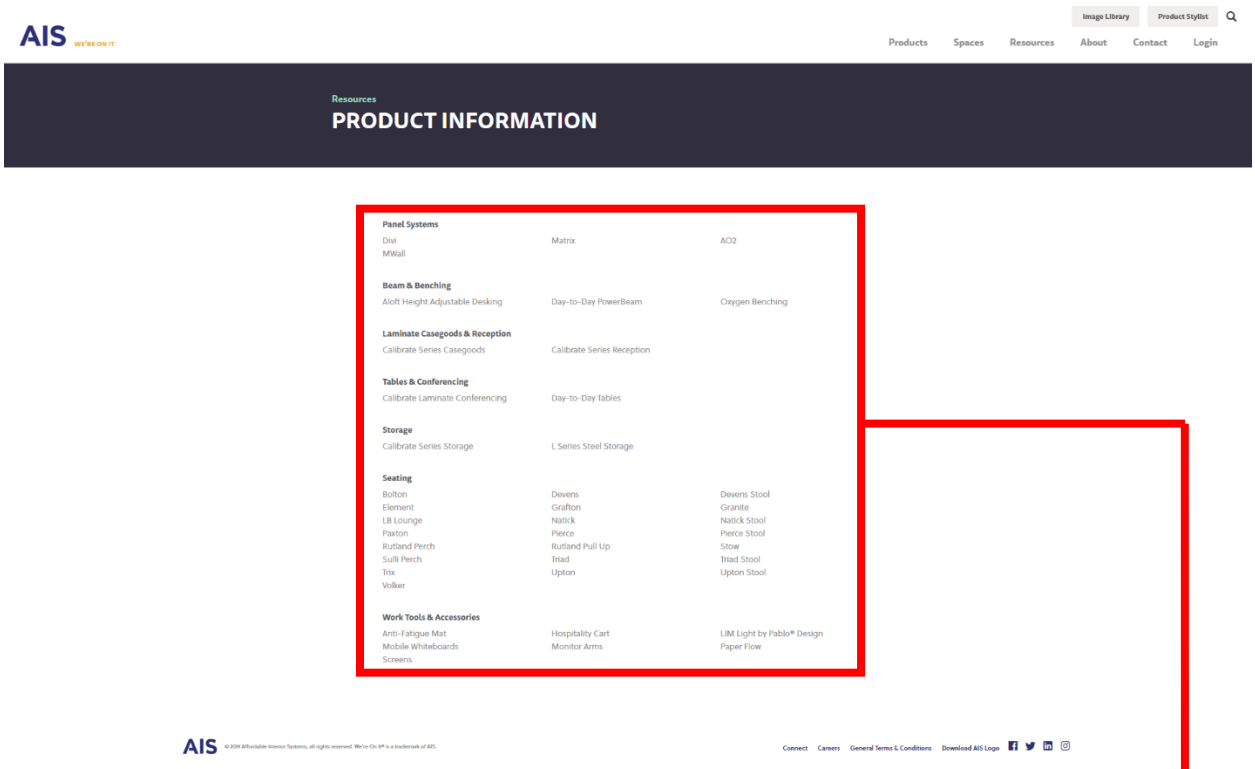


Price Lists Page

Click on the appropriate price list to verify list pricing.



Product Information Page



Click on the product line for which additional product information is needed

Panel Systems

Divi	Matrix	AO2
MWall		

Beam & Benching

Aloft Height Adjustable Desking	Day-to-Day PowerBeam	Oxygen Benching

Laminate Casegoods & Reception

Calibrate Series Casegoods	Calibrate Series Reception

Tables & Conferencing

Calibrate Laminate Conferencing	Day-to-Day Tables

Storage

Calibrate Series Storage	L Series Steel Storage

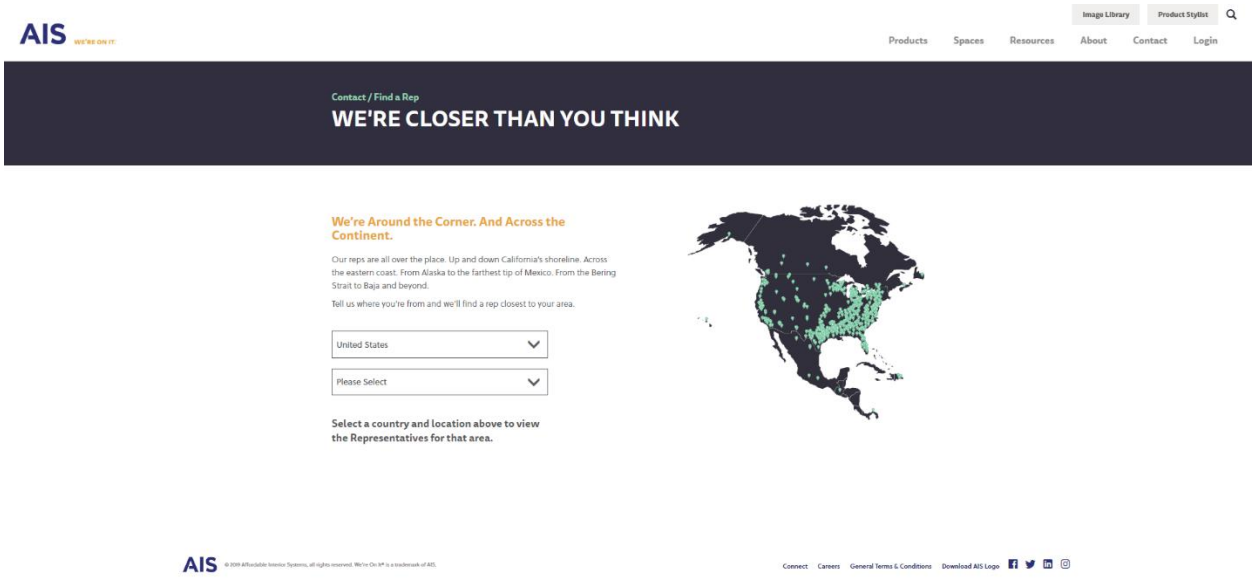
Seating

Bolton	Devens	Devens Stool
Element	Grafton	Granite
LB Lounge	Natick	Natick Stool
Paxton	Pierce	Pierce Stool
Rutland Perch	Rutland Pull Up	Stow
Sulli Perch	Triad	Triad Stool
Trix	Upton	Upton Stool
Volker		

Work Tools & Accessories

Anti-Fatigue Mat	Hospitality Cart	LIM Light by Pablo® Design
Mobile Whiteboards	Monitor Arms	Paper Flow
Screens		

Find an AIS Representative Page



Select appropriate location in drop down menu to find a local AIS representative

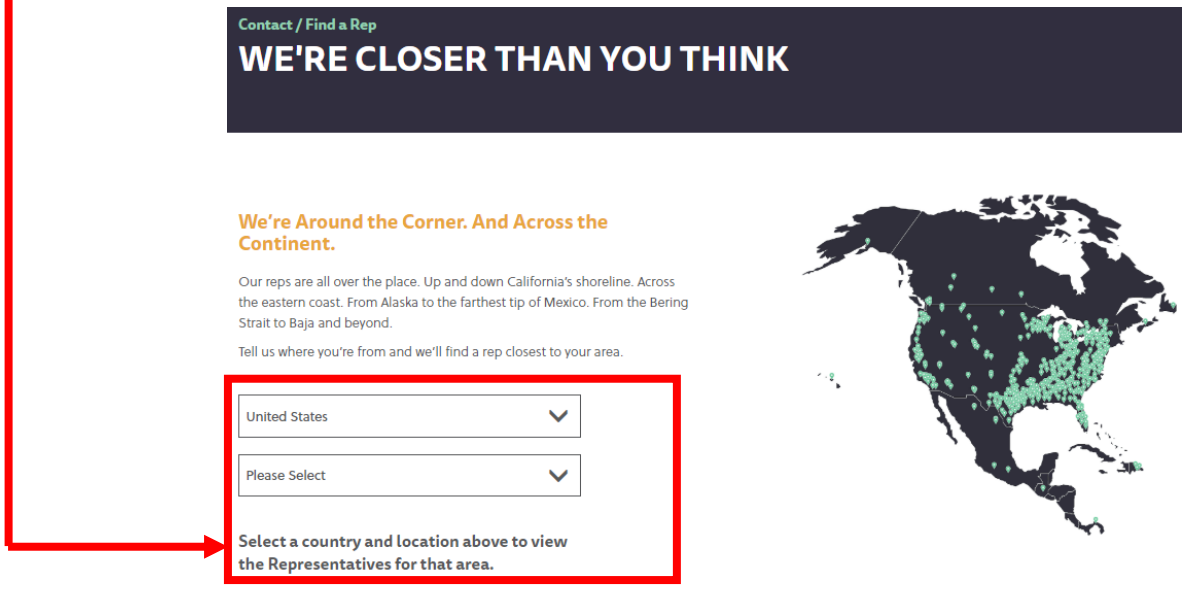
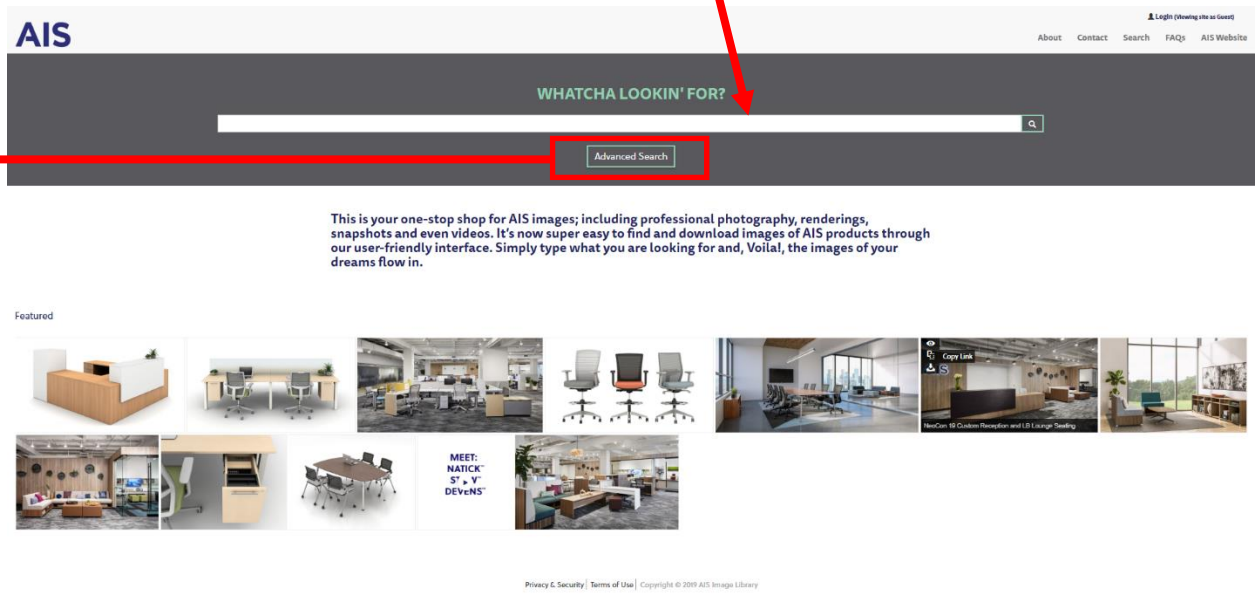
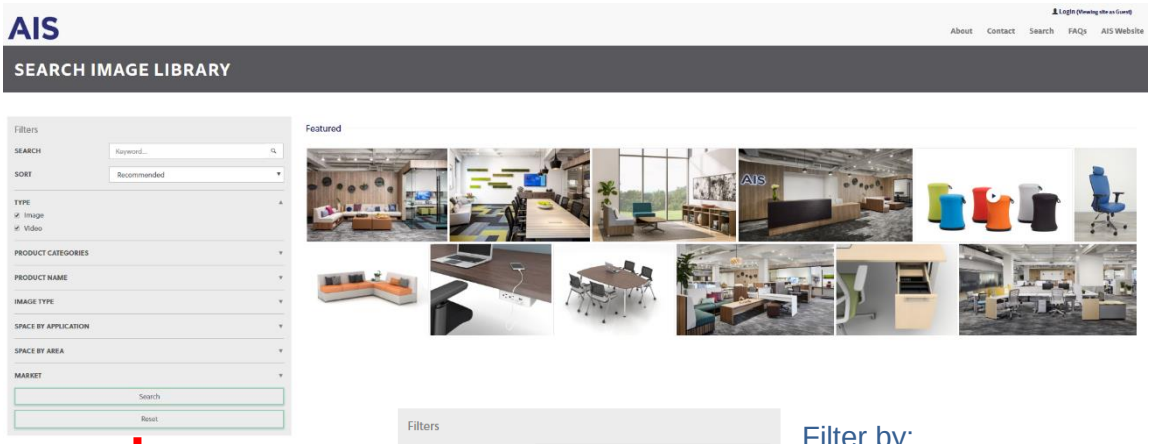


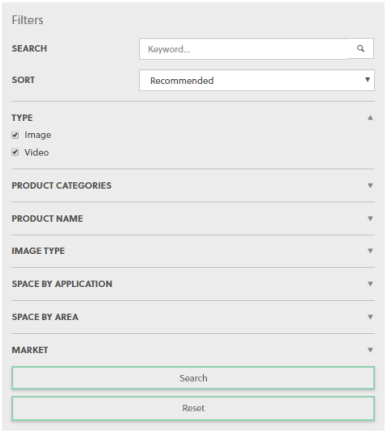
Image Library Page

Type in a description of what you would like to see



Or used the Advanced Search feature to use the below filter options to populate the desired image





Filter by:

- Product Categories
- Product Name
- Image Type
- Space by Application
- Space by Area
- Market

xiv. Describe the Offeror's safety record.

Health & Safety

There is no job so important – nor any service so urgent – that can't we take time to work safely. At AIS, we believe that every person is entitled to a safe and healthy environment in which to work. Our policy is oriented toward affirmative control and minimization of risk to the greatest extent possible. We have a basic responsibility to make the safety of employees our concern because, at AIS, our employees are our most valuable asset. Therefore, safety is everybody's business and is to be given primary importance in every aspect of planning and performing all AIS activities so that our employees are protected against industrial injury and illness.

Establishment and maintenance of a safe working atmosphere is the shared responsibility between AIS and its employees at all levels of the organization. To this end, every effort will be made to achieve the goal of accident prevention and health preservation.

Each employee begins their career at AIS with comprehensive Health & Safety Training. The AIS' Health & Safety Team meets regularly to coordinate new hire training, and to keep informed on new processes and regulations that relate to employee health and safety. Regularly, the AIS Health & Safety Team will review and update our policy to incorporate any changes in the laws and regulations that govern our conduct, such as OSHA, as well as internal procedures and requirements.
We expect our employees to do their part in making our program an effective one. All employees are required to immediately report any job-related injury to their direct supervisor or manager so that corrective actions can be implemented that will detect, avoid, or respond to actual and potential threats to the health and safety of AIS' personnel.

- Avoid overloading electrical outlets with too many appliance or machines
- Use flammable items, such as cleaning fluids, with caution
- Walk – don't run
- Use stairs one at a time
- Report your manager if you or a co-worker becomes ill or is injured
- Ask for assistance when lifting heavy objects or moving heavy furniture
- Smoke only in designated smoking areas.
- Keep cabinet doors, file and desk drawers closed when not in use
- Sit firmly and squarely in chair that roll or tilt
- Wear or use appropriate safety equipment as required in your work
- Avoid "horseplay" or practical jokes
- Start work on any machine only after safety procedures and requirements have been explained (and you understand them)
- Use air hoses only for the use intended. Avoid blowing air at yourself or anyone else
- Wear appropriate personal protective equipment, like shoes, hats, gloves, goggles, spats, hearing protectors, etc., in designated areas or when working on operation which requires their use.
- Keep your work area clean and orderly, and the aisles clear
- Stack materials only to safe heights

- Watch out for the safety of fellow employees
- Use the right tool for the job, and use it correctly
- Wear gloves whenever handling castings, scrap, barrels, etc.
- No cell phones on factory floor or in use during work hours
- No headphones are allowed on the factory floor
- Operate motorized equipment only if authorized by your immediate manager. All operators must be licensed by AIS

xv. Provide any additional information relevant to this section.

Appendix D, Exhibit A

3.1 Company

A. Brief history and description of Supplier.

A Story of Innovation.

In 1989 founders, Arthur Maxwell and Bruce Platzman started AIS by procuring and installing used furniture. AIS grew quickly in the early 90s to be a scalable company that embarked into manufacturing. We believe that good ideas will get you everywhere. In less than 30 years, we've evolved from a start-up based on the simple intent to adopt lean manufacturing to become one of the most highly regarded names in the industry. AIS has earned acclaim for product design, ground-breaking manufacturing and unparalleled sustainability across the industry and within our local and regional communities. And, our deep roots in New England are a great source of pride for us.

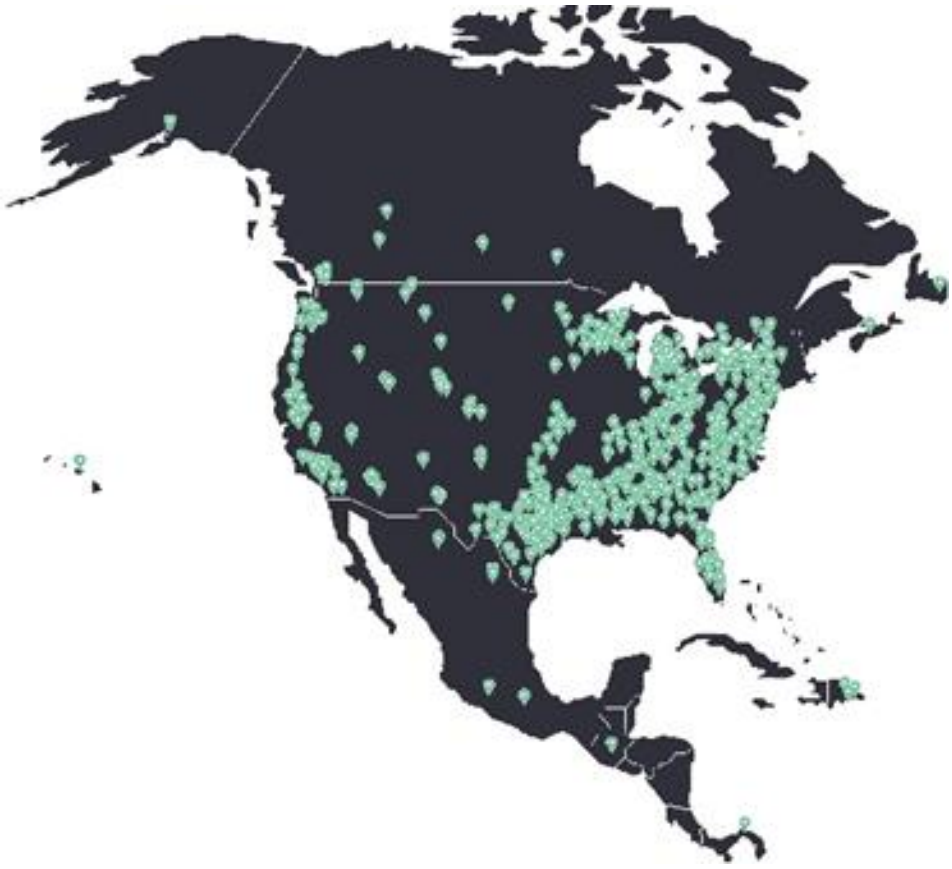
Tremendous growth and recognition.

AIS set out to disrupt the industry through true innovation and sustainability—a vision that has consistently paid off for our company and our customers. The talented, enthusiastic AIS team has virtually reinvented product development and manufacturing processes, helping us grow far faster than industry benchmarks and earning OFDA Manufacturer of the Year nine times since 2008. Today, with sales teams across North America and over 800 employees at our new 600,000-square-foot factory and headquarters, we've risen to annual sales of more than $200 million. One thing, however, will never change—our commitment to superior products with industry-beating lead times and attractive prices.



More than providers. True partners.

Through a robust network of expert dealers, our employees drive to continually break new ground with inventive products and processes, and unwavering dedication to our customers and community. AIS has established itself as a partner of choice—whether furnishing a start-up space or fulfilling a new vision for a Fortune 500® firm.



Strong Dealer Network Across North America.

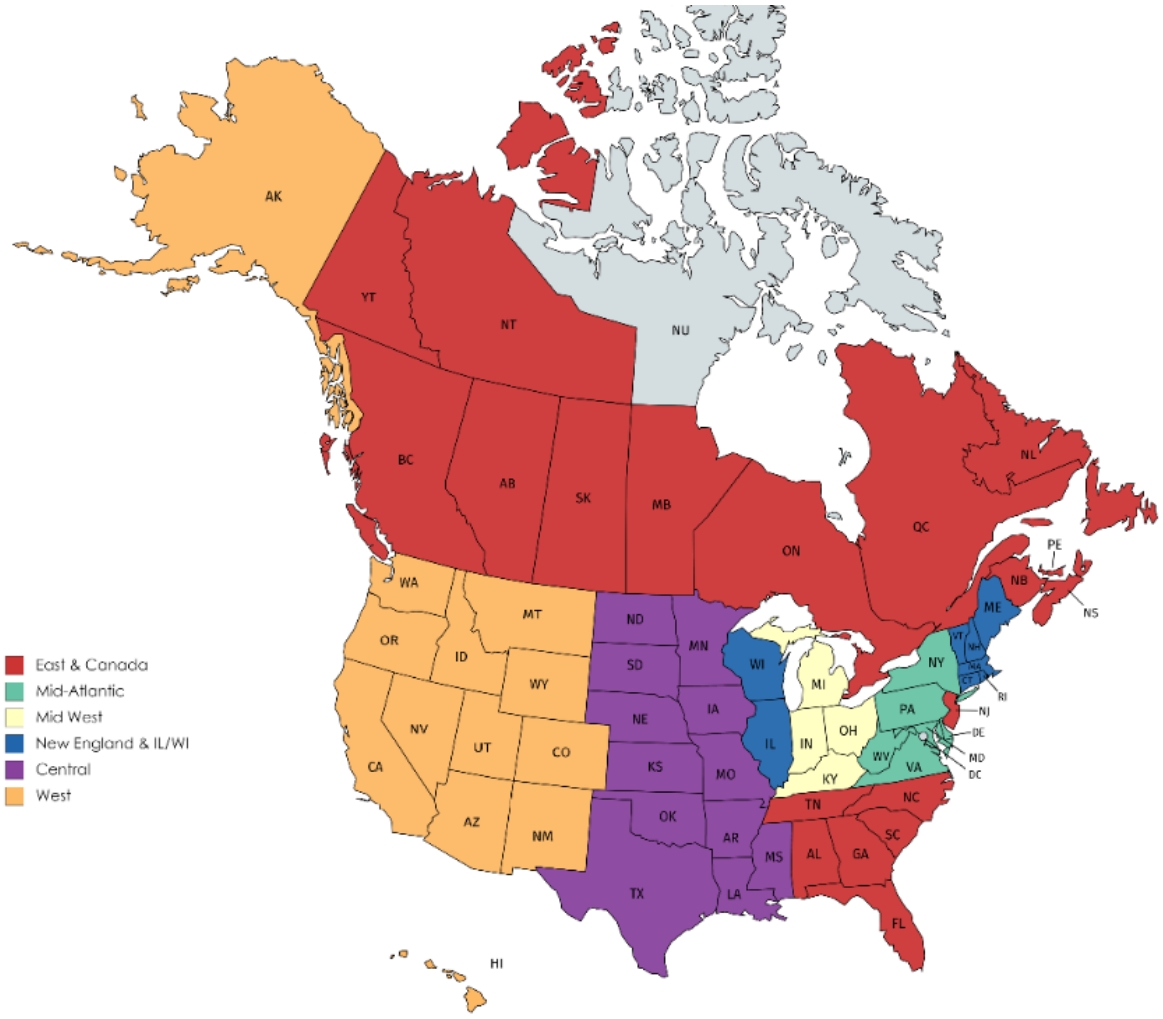
Sustainable from the start.

Since the beginning, AIS has led the way in sustainability—making social responsibility and our environment a top priority. Our visionary team recognized early on that efficient manufacturing is naturally more sustainable, requiring fewer resources and less energy. We've invested in alternative energy and moved toward carbon neutrality. And as a privately held firm, AIS has greater freedom to explore innovative processes and equipment, as well as ways to eliminate wasted time, steps, inventory and resources, as we strive to inspire a greener industry overall.

Today, all AIS products are SCS Indoor Advantage™ Gold certified for air quality, and AIS systems contain at least 40% recycled materials. What's more, we've achieved BIFMA e3 level® certification on our products, and more than 50% of the power used in our state-of-the-art facility is returned to the grid through our rooftop solar panels.

From the talent we hire to the way we design, manufacture and distribute our products, AIS has always thought differently.

B. Total number and location of sales persons employed by Supplier



East & Canada
Senior Vice President: 1
Senior Territory Managers: 2
Territory Managers: 7
Independent Representatives: 9
Business Development Managers: 1
A&D Representative: 1
GSA Business Development Managers: 1

Mid Atlantic
Regional Vice Presidents 1
Territory Managers: 5
Independent Representatives: 5
Sales Associates: 1

Mid-West
Regional Vice President: 1
Territory Managers: 2

New England & IL/WI
Regional Vice President: 1
Territory Managers: 6
Business Development Managers: 1
Contract Sales Specialist: 1
Sales Associates: 1

Central
Regional Vice President: 1
Territory Managers: 3
Independent Representatives: 20
GSA Business Development Managers: 1

West
Regional Vice President: 1
Territory Managers: 4
Independent Representatives: 8

C. Number and location of support

AIS has permanent showrooms at its Leominster headquarters and in Chicago, New York City and Washington, D.C. With locations across the U.S., AIS has more than 800 employees and over 1 million square feet of office, showroom and factory space.



Chicago: Merchandise Mart, Suite 1086, Chicago, IL 60654
On the 10th floor of the Merchandise Mart in Chicago you'll find our 7000+ sf showroom where visitors are welcome daily.



New York: 257 Park Avenue South, 3rd Floor, New York, NY 10010
This recently renovated showroom highlights our products and houses our New York sales team.

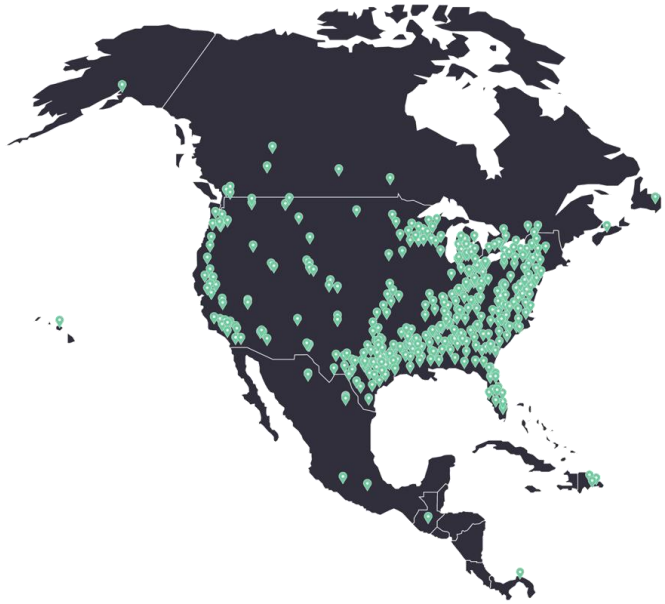


Washington D.C.: 1400 I Street, Suite 750, Washington DC 20005
Located on I Street in Washington, DC – just a stone's throw from the White House, our AIS showroom features a wide range of our products and welcomes visitors regularly.



Corporate Headquarters: 25 Tucker Drive, Leominster, MA 01453
Just 45 miles from Boston, our headquarters shines, and guests visit regularly.

AIS has over 1000 dealers/support centers located across the United States and other countries. Our authorized dealer list is included in our response.



Strong Dealer Network Across North America.

D. Annual sales for the three previous fiscal years.

- 2019: $219MM
- 2018: $197MM
- 2017: $170MM

E. Submit FEIN and Dunn & Bradstreet report.

Affordable Interior Systems, Inc. (AIS) FEIN: 04-3489948

Our Dunn & Bradstreet report is managed by our parent company, Haworth, Inc. We are not able to provide the report in our response.

Haworth, Inc FEIN: 38-6053093

F. Describe any green or environmental initiatives or policies.

At AIS, sustainability isn't about making incremental changes to meet third-party standards—it's about fully reimagining design and manufacturing to create the leanest, most earth-friendly products and processes possible. Our company was founded on a single noble vision—to build tremendous value and efficiency into superior workplace products. Reducing waste, minimizing energy use and keeping items out of landfills are a natural part of achieving our mission. For example, durable, reconfigurable products last longer and can be reused. Cutting out weight reduces the drain on resources. And returning more than 50% of the energy we use every year back to the grid through our 10,000 solar panels ensures savings can be passed along to our customers. All AIS systems are SCS Indoor Advantage™ Gold certified for air quality, we hold BIFMA e3 level® certification, and we can help customers gain points toward LEED® certification for new and renovated environments. Our AIM Sustainability award further reinforces our leadership and commitment to sustainable practices.





Over 10,000 solar panels on roof of HQ in Leominster, MA.

Sustainability from design through delivery.

The AIS design philosophy recognizes that the greatest environmental impact can be made at the concept stage, as we select materials and construction methods. We continually challenge ourselves and, as a result, our products all contain at least 40% recycled materials and are manufactured in a facility where a majority of the energy is returned to the grid through rooftop solar panels.

Investments in emerging manufacturing technologies, alternative energy and carbon offsetting have helped bring our carbon footprint to almost zero.

Our partnership with ANEW helps ensure our used furniture has new life at nonprofits and public agencies. And, since our products are designed for easy disassembly and recycling, they will minimize environmental impact at the end of their useful lives. Sustainability is not a single, discrete initiative. It's been woven through everything AIS has done since we opened our doors.

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Corporate Sustainability Policy

AIS is committed to achieving excellence through continuous improvement and teamwork. As an established world- class manufacturer, it is our goal to achieve prominence within the office furniture industry by providing the best value to both our customers and our shareholders. AIS will aggressively pursue our following beliefs:

- AIS will exceed our customers' expectations in all that we do.
- AIS will pursue profitable growth returning value to our shareholders and better opportunities for our employees.
- AIS will deliver a low cost, innovative product on time, every time AIS will continuously improve our product quality as we strive for perfection.
- AIS will utilize the most environmentally friendly manufacturing processes and materials.
- AIS will aggressively eliminate all wastes throughout our operations.
- AIS will train and nurture our employees, our most valuable resource.
- AIS will operate with integrity and will participate in our civic duties.
- AIS will comply with all applicable environmental, health, safety, and inclusiveness laws and regulations

1.0 Environmental Sustainability

AIS is committed to the production of high quality, durable products that conserve resources. We understand that today's actions could be tomorrow's consequences. That's why AIS carries the philosophy of using today's actions to build a cleaner, healthier environment we can all benefit from. At AIS, sustainability is our corporate responsibility – from the environment, our products, our people and our processes, we are committed to developing sustainable business practices while enhancing the value offered to our customers.

Design for Environment
The opportunity for improving the environmental performance of our products starts on the drawing board. AIS' recognizes the importance of environmentally conscious design and has developed a Design for Environment (DfE) team committed to incorporating sustainable elements into our design process. When developing new products our DfE team considers and strives to improve the following design elements: Renewable Materials, Recycled Materials, Recyclable and Biodegradable Materials, End of Life Management, Water Management and Energy Efficiency.

Design for Durability / Upgradeability
To provide our customers with the quality they desire, AIS designs and manufactures products to live long and useful lives. This is exemplified by a limited lifetime warranty on all systems furniture to the initial purchaser which is valid for as long as the product is owned by the original Buyer. The warranty which runs from the date of manufacture, covers defects in materials and craftsmanship found during normal usage of the products during the warranty period. Please see our product Lifetime Warranty for more information.

At AIS, we know that it can be difficult to foresee the future needs of your business. That's why our systems are designed to withstand repeated service, repair and handling for whatever the road ahead may bring. Our systems also feature standardized product parts and components, which are available to facilitate maintenance, servicing, and reassembly.

Energy Conservation
By reducing our energy consumption and GHG emissions, AIS is making great strides in reducing our impact upon the environment while ensuring our sustainability as an organization. To do so, AIS practices an approach of continuous improvement to reduce our energy and carbon footprint. In fact, AIS has established a goal of zero GHG emissions. Our environmental management system ensures that we are establishing realistic targets and objectives for the future while holding ourselves accountable to these goals.

Still we felt this was not enough. We decided to think outside of the manufacturing walls and investigate ways to reduce our current global greenhouse gas (GHG) footprint by investing in renewable energy solutions and other low or zero GHG emission strategies. We believe this would provide benefits to not only AIS and our customers, but also the industry as a whole by taking a leading position in the right direction. Annually, AIS measures the CO2 emissions produced from our manufacturing operations, and with this data we are able to identify and implement strategies that ensure our energy is produced by renewable sources. To involve our stakeholders on this journey, AIS is committed to publishing our GHG emissions to hold ourselves accountable as we continue to strive towards our zero emissions goal.

Energy Efficient Purchasing
Whenever possible the AIS Purchasing Team will quote and purchase products that are Energy Star rated or have high energy efficiencies.

Solid Waste Management
As a part of the AIS Lean manufacturing philosophy, we analyze our manufacturing streams thoroughly and cut waste from every possible avoidable angle. With every new process or product that is developed our Lean committee continues to review and reduce waste whenever possible. Through these efforts, it is the goal of AIS to achieve 100% landfill diversion of solid waste from our manufacturing operations through our waste reduction efforts, lean manufacturing, recycling and product reuse.

Harmful Chemicals
It is the goal of AIS to assess and manage all chemicals associated with our products, processes, and maintenance operations in a manner that complies with all applicable federal, state, and local environmental regulations. As a good steward of human health and the environment, AIS will also go beyond basic chemical management to develop and implement a program that will address areas such as, but not limited to:

i. continuous improvement in the identification, reduction, and potential elimination of chemicals of concern Updated: 10/4/18
ii. prevention of pollution through reductions in exposure of workers, customers, and the environment to harmful chemicals
iii. consideration of the life cycle impacts through our DfE and chemical management plan of our products, manufacturing processes, and maintenance activities
iv. responsibility to the well-being of our workers, community, and the broader environment

G. Describe any diversity programs or partners supplier does business with and how Participating Agencies may use diverse partners through the Master Agreement. Indicate how, if at all, pricing changes when using the diversity program.

As a large business GSA contract holder, AIS is required to submit yearly small business subcontractor plans and reports to GSA. These plans and reports must be approved by GSA and the Small Business Administration (SBA). AIS makes a good faith effort to meet the established small business subcontracting goals while being cognizant of the overall cost to customers. Utilizing small businesses has the potential to reflect an increase in purchasing costs, resulting in inflated selling points. AIS' team of professionals will explore all small business opportunities that fall within our subcontracting plan while avoiding any extended impact on our customers.

AIS has numerous authorized dealers that hold minority status. Certificates for minority status can be provided by the authorized dealer. AIS can offer the following socio-economic set-aside solutions:

- Small Business
- Small Disadvantaged
- Woman Owned
- Woman Owned Small Business
- Veteran Owned Small Business
- Service-Disabled Veteran Owned Small Business
- HUBZone
- 8(a)
- And more

Being awarded the Region 4 ESC/OMNIA Master Agreement would provide a purchasing avenue for our clients that qualify. The Master Agreement would reduce our client's administrative costs by accessing this cooperative contract that has already been advertised and publicly competed, as well as enables the economic benefits of volume purchasing.

H. Describe any historically underutilized business certifications supplier holds and the certifying agency. This may include business enterprises such as minority and woman owned, small or disadvantaged, disable veterans, etc.

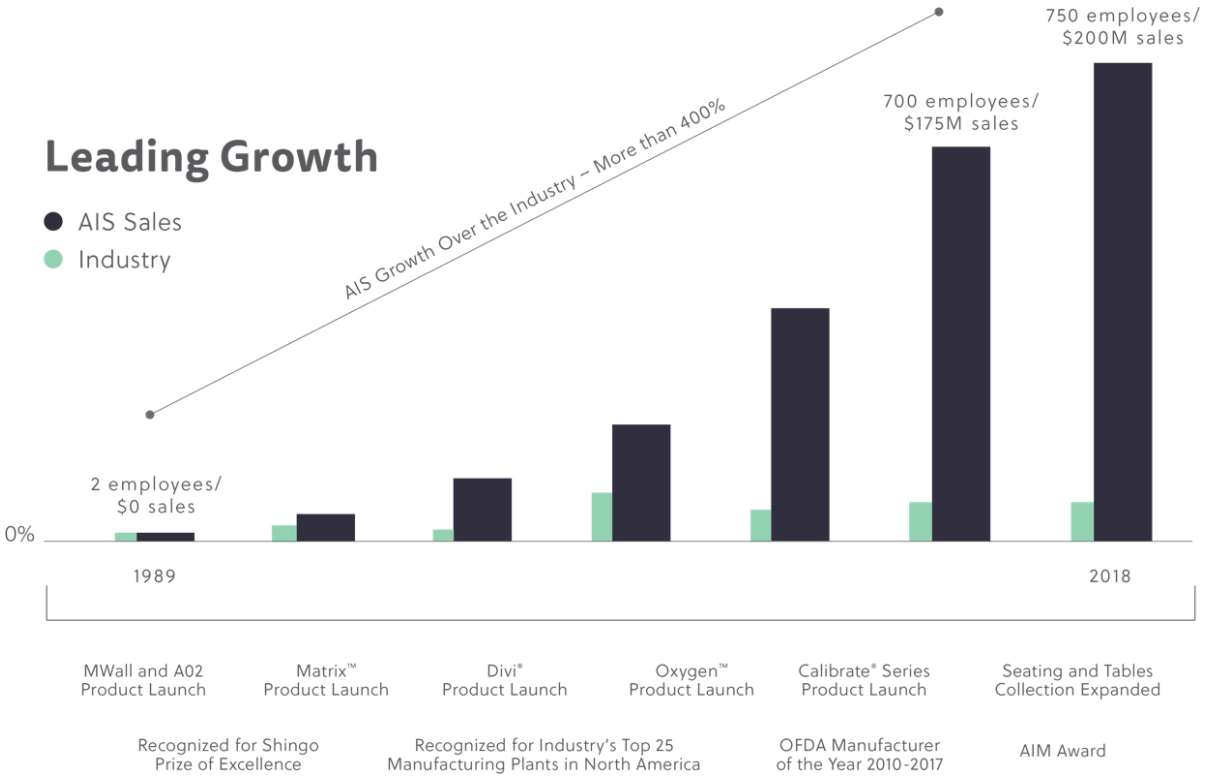
AIS is classified as a large business and does not hold any set aside certifications.

I. Describe how supplier differentiates itself from its competitors.

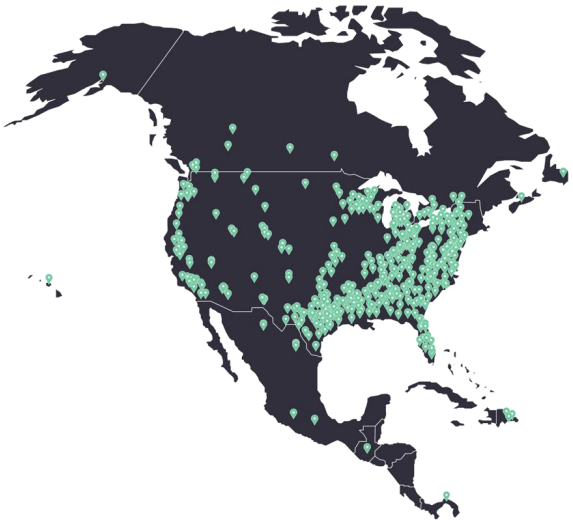
AIS is known in the marketplace for being an innovator that leads the industry in sustainable, lean manufacturing, lead-time performance and manufacturing flexibility.

The many advantages that differentiate AIS from its competitors include:

1. Our growth. AIS has outpaced the industry by more than 400%. Our growth is remarkable every year and our teams are committed to our customers every day.



2. A dealer network of over 1000 dealers across the United States and other countries. Our authorized dealer list is included in our response.



3. AIS offers the best lead times in the industry and 75% of our products ship in two (2) weeks or less. If successful as a vendor partner, we will provide key internal contacts form our customer service and project management teams that can expedite emergency orders. If all the components of the emergency order are stock items, we can typically respond in less than two (2) weeks or even shorter depending on the products specified.

4. A low maximum order limit (MOL) allowing increased opportunity for extending deeper discounting.

5. Shingo Prize winner for lean manufacturing.
The Shingo Prize for Operational Excellence was established in 1988 to promote awareness of lean manufacturing concepts and recognize companies in the United States, Canada, and Mexico that achieve world-class manufacturing starts. The Shingo Prize philosophy is that world-class business performance may be achieved through focused improvements in core manufacturing and business processes. AIS is a proud recipient of the Shingo Prize, and continues to uphold the highest manufacturing standards.

THE SHINGO PRIZE for OPERATIONAL EXCELLENCE

6. The AIS design philosophy recognizes that the greatest environmental impact can be made at the concept stage, as we select materials and construction methods. We continually challenge ourselves and, as a result, our products all contain at least 40% recycled materials and are manufactured in a facility where a majority of the energy is returned to the grid through rooftop solar panels.



Investments in emerging manufacturing technologies, alternative energy and carbon offsetting have helped bring our carbon footprint to almost zero.

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7. No third-party design houses. All products are designed in-house by a small team.

8. Ability to reconfigure existing product by using updated products and universal parts. AIS products are easily reconfigurable and can easily incorporate new product additions. This saves time and money on purchasing agencies by not having to purchase completely new office furniture.

9. Few layers of management. We accomplish action items faster and can implement change quickly.

10. No job is too small. Whether you're a two-person firm or a global enterprise, AIS and our broad dealer network are ready to help you create work environments that best support your people and their unique needs.

11. Specification department to facilitate multiple design needs include design checks, specification support, rendering services and mock-up/showroom reviews.

12. Project managers and field service managers available on call to assist with installations.

J. Describe any present or past litigation, bankruptcy or reorganization involving supplier.
AIS does not have any present or past litigation, bankruptcy or reorganization.

K. Felony Conviction Notice: Indicate if the supplier
B. is not owned or operated by anyone who has been convicted of a felony.

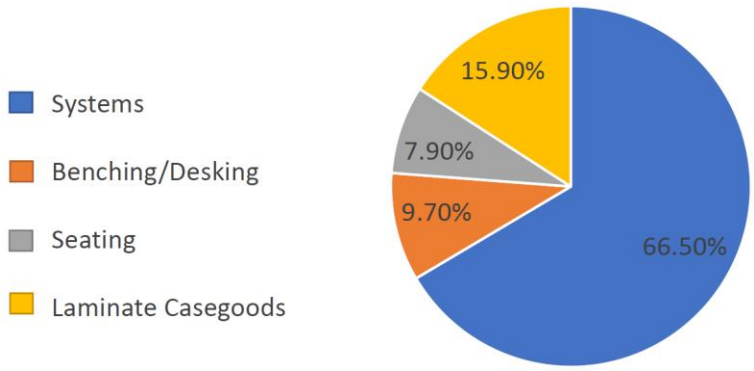
L. Describe any debarment or suspension actions taken against supplier
AIS has not and does not have any debarment or suspension actions.

3.2 Distribution, Logistics

A. Describe the full line of products and services offered by supplier.
AIS is offering our entire product portfolio and all current commercial price lists. Our products can be classified in the following categories:

- Systems Furniture
- Freestanding Furniture
- Seating/Chairs
- Soft Seating
- Filing Systems, Storage and Equipment
- Technology Support Furniture
- Cafeteria Furniture
- Educational Office Furniture
- Career/Technical Education Furniture
- Related Products, Support Services and Solutions

The AIS product portfolio includes panel systems, benching and desking systems, tables, casegoods, storage and seating. The percentage of 2018 sales per product line is illustrated below.



AIS provides products and services for all phases of this project that will not only meet, but also exceed your expectations. AIS and our extensive dealer network will work together to accomplish your goals of a best-in-class office space that meets a wide variety of needs, while providing an environmentally preferred product, installed in a timely manner, at the lowest cost possible.

We are proposing our complete product portfolio listed on following pages.







Matrix

Creates sophisticated, flexible work spaces that stack up to stand the test of time—in the open plan, private offices, reception areas, conference rooms, and more. Paired with components and accessories from our Calibrate line, employees enter a new dimension of collaboration and productivity.

Open Plan Options: Introduced in 2002, Matrix offers users a 3" stackable panel with multiple options, including open raceways and upmounted glass. It's broad statement of line provides options for departments that need openness in order to collaborate, to departments that have a high need for privacy.

Functionality: Strong foundational and power elements ensure a broad range of applications thanks to the steel frame, stackability and flexible power management, ensuring that Matrix can withstand multiple changes. Clients can refresh the look of their space with tiles that can be interchanged quickly on-site. Stack options allow a client to modify their space - an open workspace can easily become a private office with stacks that can go floor to ceiling and an optional door for complete privacy. Matrix offers power every 8" of height, allowing for more capacity and placement options than any tile system in the market.

Integration: Matrix integrates well with the Calibrate Series of Casegoods and Storage to create a higher end look in the open plan or within the walls of a floor-to-ceiling Matrix office. A Matrix spine can easily integrate with Day-to-Day and Calibrate Conference height adjustable tables for a more ergonomic option, with power and data easily accessible at any height.







Divi

Slice, dice, and define the open plan with Divi. This smart, scalable panel system was made for the realities of modern work, where people need a healthy balance of privacy and connection. A smart subset of popular Divi elements are available through the Divi Fast Track program, with 10-day lead times.

Open Plan Options: Divi Linear is offered in monolithic, segmented, glass and limited stack panels, used alone or blended. Additional panel options include embossed metal, laminate and whiteboard. Change the look of open plan with upmounted storage and frameless glass screens.

Functionality: Divi's uncomplicated design allows for quick installation and ease of change with a universal hinge that allows 90-, 120- and 135-degree configurations using a single platform. Power and data needs are easily met through a 6" base raceway. The new Divi Linear is compatible with the former Divi panel design, ensuring elements can be retrofitted with ease.

Integration: Divi Linear forms the foundation for integration with Calibrate® Series laminate storage, Day-to-Day® Tables and readily accommodates height adjustable tables.

Divi Fast Track: Quick ship program with **10-day lead times**.





AO2



One of our longest tenured products for a reason—it works, like all timeless design should. AO2 is a monolithic panel system designed to be stand-alone, but it can also be used interchangeably or in tandem with Herman Miller® Action Office Series 2.

Open Plan Options: AO2 provides you the flexibility to design your space to meet your needs. Panels 2" thick and are offered in three heights, six widths and quarter-glass, half-glass and full glass options. From cluster working environments to private offices, you can design AO2 to work for you. Utilize low-panel heights to boost a teaming environment or integrate high panels to create an increasingly private configuration. Couple your chosen layout with storage options and an Element Executive chair to create a complete office space.

Functionality: The AO2 system is equipped with a 6” base raceway, 3 3/8" thick, to meet demanding electrical and data needs. AO2 panels are constructed of a rigid honeycomb core and trimmed with a steel frame. With virtually unlimited worksurfaces, components, accessories and finish options, AO2 is the ideal combination of performance and value. These features, coupled with its compatibility with Herman Miller® Action Office®, make A02 a sensible value-based option to expand an existing office space for less.







MWall

Looks like a panel system but acts like a chameleon—blending naturally into virtually every office setting. The engineering is based upon a well-known, high-end system and can be enhanced for increased flexibility and electrical options. And it's priced right for companies on a tight budget.

Open Plan Options: With panels offered in four varying heights from 41" - 80" and six varying widths from 18" - 60", as well as quarter glass, half glass, and full glass options - you can create spaces that will work for every type of environment. MWall's connection system allows panel connections at 90, 120 and 135 degrees. MWall utilizes an aluminum topcap and base that can be painted in any color. Panels at 80" high can be used to create private office spaces and conference rooms.

Functionality: There is ample room in the MWall powered raceway for Category 5/6, or other cable requirements. The top channel data raceway allows for added capacity and flexibility with true power and data separation in a single panel. MWall includes the patented Z-Panel option, providing desk-height access to power and communications. Z-Panel enables workers to plug in power or data cables with ease while also providing voice and data cable separation.





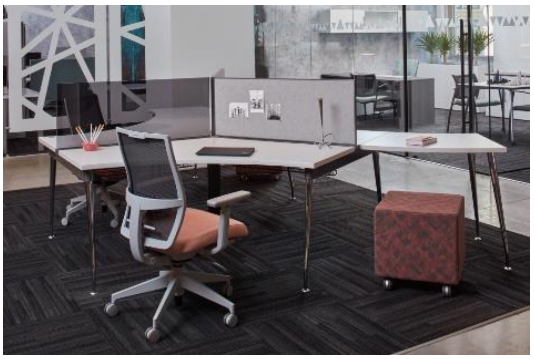


Day-to-Day Power Beam

Ultra-efficient PowerBeam adds impressive capabilities to Day-to-Day tables. Available in multiple lengths, angles, and heights to optimize space within your floorplate, PowerBeam ties it all together, putting power just where it's needed. Thousands of table combinations, and the power to support them. There's nothing this dynamic duo can't do.

- Extruded aluminum 2.5" x 8" beam
- Straight, 90-, 120-degree connections
- Heights (3): 21", 25", 29"
- Widths (11): 36", 42", 48", 54", 60", 66", 72", 78", 84", 90" & 96"
- Supports:
  - 12" and 18" T-base and disc-base
  - End Panel
  - Calibrate Series Storage (29" PowerBeam only)
- Legs have 2" of built-in leveling
- Power Options:
  - 4 duplexes (equaling 8 outlets)
  - 3 duplexes (equaling 6 outlets) and 1 data outlet
  - Dual USB ports
- Basefeed options:
  - Undermount, ceiling and wall feed
- Non-powered option available
- Optional Vertical Wire Manager and Powercord Tray
- Screen Options: Fabric, Whiteboard, and Glass
- Paints: All AIS paint grades and COM
- Optional attachments: bag hook and mini-shelf







Oxygen

From open, collaborative spaces to more focused environments, Oxygen is designed to meet the demands of any workplace. It's engineered for the way your customers work today, but since change happens, it's also designed for their future. More people? No worries. Switching spaces? Not a problem. Oxygen can constantly adapt with its flexible components and versatile design.

Open Plan Options: Oxygen benching offers many options for the open plan including straight or angled legs, fabric and glass screens, and a rail system that houses all the worktools needed to be productive throughout the day. Oxygen's sleek lines and straightforward design create an open plan that is lighter in scale than traditional workspace options. Its broad product offering was designed to maximize density requirements in order to utilize real estate and adjust to changing business needs.

Functionality: Oxygen's structural spine accommodates electrical needs with a standard 8-wire multi-circuit powerway. A 10-wire multi-circuit options is also available. Oxygen includes a standard tiered wire management basket for routing electrical and data bundles separately. The optional flip-top worksurface access box provides termination single gang device plates and access to duplex outlets. Desktop power access is also available.

Integration: Like many AIS products, Oxygen was designed to integrate. Storage needs can be met with Calibrate or L Series Storage. Work needs can be met through the integration with the AIS Universal Worktool line of products.







Aloft

Aloft is height-adjustable benching that's tailor-made for the open plan. A NeoCon Silver award winner, Aloft combines the features and functionality of a bench system with the ergonomic health benefits of standing workstations. For teams that need dynamic benching, this thoughtfully designed platform rises – and lowers – to the occasion.

Open Plan Options: Aloft worksurfaces are offered at fixed height or fluid programmable motorized option and are designed to meet the latest ergonomic standards for maximum health benefit. Aloft offers multiple worksurface shapes to meet the needs different workstyles. Its height adjustable 120-degree worksurfaces maximize space and provide more room to work. Additionally, privacy can be achieved at any height with screens that are mounted to Aloft's worksurfaces.

Functionality: Aloft's under the worksurface lateral baskets and vertical belts keep the office neat while channeling cables to the worksurface. The under-mount power can support up to four duplex outlets or combinations with two USBs per seat. It's return surfaces can receive power and data, creating multi-purpose work areas that allow users to find their most comfortable working position. Users will never be at a loss for their power needs in Aloft's user-friendly responsive spaces.







Calibrate Series

Calibrate Series has you covered—case closed. This collection of high-quality laminate casegoods looks great and works well across the private office. It's got a myriad of finishes, hardware options, and loads of styles to choose from. Best of all, it won't break the bank.

Comprehensive Product Offering: Calibrate offers an extensive statement of line with options for 2" high aluminum feet or a base that extends full to the floor. Pull options include Bar, L, Loop and Rectangle. Edge options include reverse knife edge and 2 mm. Leg options include tapered, round post, and straight. Existing AIS legs can be used: slim, slant, N, and A legs. Height adjustable options are available with a laminate base and can be ordered in programmable or manual lifts with a range of 26" - 46".

Wide Variety of Finish Options: Calibrate Series includes over 20 laminate colors and 5 paints. All of the aesthetic options can be used interchangeably between Calibrate Series Casegoods, Storage and Conferencing.

Integration: All Calibrate Series elements can be used alone to create beautiful private offices and boardrooms. Elements can also be integrated into the open plan to enhance Matrix, Divi, Oxygen and Aloft. All heights are synchronized within the line and with other AIS products without misalignment of heights. Calibrate Series laminates can be shared with all relevant AIS products to create a cohesive look across the floorplate.







Calibrate Conferencing

Calibrate Conferencing is current. It's contemporary. It's created for productive meetings, where people are connected to their technology and each other. Design choices include a variety of sizes, shapes, edge details, and bases. Power and data options optimize convenience. Best of all, with more than 20 high-quality laminate options, they coordinate seamlessly with other Calibrate Series products.

Comprehensive Product Offering: Calibrate Conferencing offers an extensive statement of line including buffets, bookcases and receptacle bins. Table shapes include rectangular, boat and tapered. Edge options include reverse knife edge and 2 mm. Legs are always fully laminate with 2, 3, and 4 base options. The line includes a height adjustable table with a laminate base and can be ordered in programmable or manual lifts with a range of 26" - 46". Additionally, tables are available with end panel storage with and without monitor mounting at standing or seated height. All tables can offer power and data integration.







Day-to-Day Tables

With over 6,500 design combinations, Day-to-Day Tables aren't just any table. They're every table. Formal, informal, training, café, height adjustable, occasional—whatever you need. From Monday meetings to Friday deadlines, Day-to-Day Tables deliver choice, value, and flexibility you can count on daily.

Features:

- Flip-top/nesting, height adjustable and fixed tables
- A variety of top shapes to select from
- Multiple base options in polished aluminum or painted finishes
- Available in 16", 29" and 42" heights
- Tables available with glides or locking casters
- 2mm or reverse knife edge options
- 18 Grade A laminate options
- Many power/data choices

Height Adjustable Table Features:

- Electronic adjustment with soft start/stop and memory presets
- Travel speed: 1.5" per second
- Dual motors
- 23.6" to 49.2" height adjustment range
- 350-lb. lifting capacity
- 42.25" to 74" adjustable base width







Calibrate Storage (Laminate)

With pull-out storage, wardrobes, bookcases, pedestals, lockers, and more, Calibrate Series does everything good storage should. No matter the application – traditional, open plan, etc. – you'll appreciate the finish choices, storage possibilities, smart design details, and super-easy integration with other AIS products.

Comprehensive Product Offering: Calibrate Series Storage offers an extensive statement of line including pedestals, lateral files, wardrobe storage towers, pantry pull-out storage, bookcases and lockers. Storage ranges from 28-42" on the floor, has four handle options and 2 feet options.



L-Series Storage (Metal)

A dynamic storage solution, L Series Steel Storage features loads of design options and finishes, ensuring ample design choices for working spaces. And they integrate beautifully with AIS desking and systems. Classic yet contemporary, L Series meets the needs of many users.

Features:

- 2, 3, 4, and 5 Drawer Lateral Files
- 49” and 65” Wardrobes
- B/F, B/B/F, F/F Mobile and Stationary Pedestals
- All storage standard with locks
- Bookcases
- 2 door cabinets
- 1” leveling glides
- Available with a laminate fronts



Seating

Task: Our task seating portfolio has just what you need for private offices, open plan spaces and conference rooms. From beautiful mesh backs to fully upholstered solutions, you'll see AIS has a great range of ergonomic task seating designed to ensure your teams have the support they need to perform. Portfolio includes 24/7 Devens, Natick, Upton, Bolton and Granite.

Side: Whether side or guest seating – or collaborative spaces, Grafton, Paxton, and Trix each bring their own personality to space. And with a variety of upholstery options to select from, it's easy to make the seating statement you want.

Multi-Purpose/Stack: Stow, Pierce, Triad and Rutland

Stools: Our range of stools and perches provide options for users today. And with height adjustability continuing to gain traction in the office, having the right seating to support posture shifts is important. Includes Natick, Upton, Pierce, Triad and Rutland.

Lounge: We haven't forgotten about the need for soft seating. In fact, we cover the range of fun to sophisticated with Volker Cubes and our LB Lounge Collection. Whether it's mobile cubes for side seating, settees for the lobby, booths for the café, or ottomans for the conference room, AIS has solutions.

Express Seating: The AIS Express Seating program supports those who need quality, comfortable seating quickly. We've selected the most common models, finishes and materials for our **three-day ship program**. When your employees need a place to sit, AIS has you covered with high-performing seating for workspaces, cafés, conference rooms, and more. With the AIS Express Seating program, new seating will be on its way in **just three days**.









Work Tools & Accessories

- Tasklights
- CPU holders
- Mobile whiteboards
- Paper flow elements
- Screens
- Anti-fatigue mat
- Monitor arms
- Hospitality cart
- And more!

AIS and our dealer network as a team can provide the following services:

- Furniture Sales and Consulting
- Design and Planning
- Delivery and Installation
- Project Management / Field Services
- Customer Service
- Reconfiguration Services
- Furniture Maintenance
- Furniture Refurbishment
- Furniture Removal and Repurpose
- Inventory and Inventory Control
- Technology Support
- Storage
- Product End-of-Life Support via ANEW

We have a fully staffed project team including furniture sales consultants, interior designers, space planners, project managers and project coordinators that use fully automated tools to take a project from concept to reality. Our customer service team will respond to Region 4 ESC/OMNIA staff and participating agency inquiries within one business day after receiving the request. Our project team is able to make field modifications and repairs on any item ordered. This process is supported through the utilization of electronic tools including, but not limited to CAD, 20/20, CAP and electronic order entry process. With our authorized dealer network, we have the personnel, vehicles and equipment available to make deliveries.

B. Describe how supplier proposes to distribute the products/service nationwide. Include any states where products and services will not be offered under the Master Agreement, including U.S. Territories and Outlying Areas.

AIS' manufacturing facility fulfills 250 sales orders a day that equates to coordinating approximately 650 pallets and dozens of trucks a day. AIS successfully supports large projects including international projects, as well as shipping small orders. AIS will work through the servicing dealer network of over 1000 dealers to provide product representation and sales support. AIS will serve its customers through a network of locally owned and operated dealers across the entire United States and Outlying Areas.

AIS' robust dealer network of authorized dealers will design, order and install products. For product specification, pricing and services, customers can email info@ais-inc.com or call our headquarters at 978.562.7500 or toll-free at 800.434.7400. The customer's request will be forwarded to a local AIS representative and/or dealer within 24 hours.

All products are made at our factory headquarters in Leominster, MA. Our geographic coverage includes the entire United States and Outlying Areas. For international shipments, the authorized dealer secures the freight forwarder of choice. AIS works with expert freight forwarders to coordinate product leaving AIS to the appropriate port. The freight forwarding company will then work with customers/service providers to manage containers and further

international shipping logistics. Once the freight leaves AIS's docks, the dealer is responsible for coordinating delivery to the final destination.

C. Describe how Participating Agencies are ensure they will receive the Master Agreement pricing; including all distribution channels such as direct ordering, retail or in-store locations, through distributors, etc. Describe how Participating Agencies verify and audit pricing to ensure its compliance with the Master Agreement.

Participating agencies can work with our authorized dealer network to verify Master Agreement pricing compliance. Our authorized dealers' proposals/quotes to Participating agencies will have list price and net price. Participating agencies will work with our dealer network for direct ordering and for showroom locations.

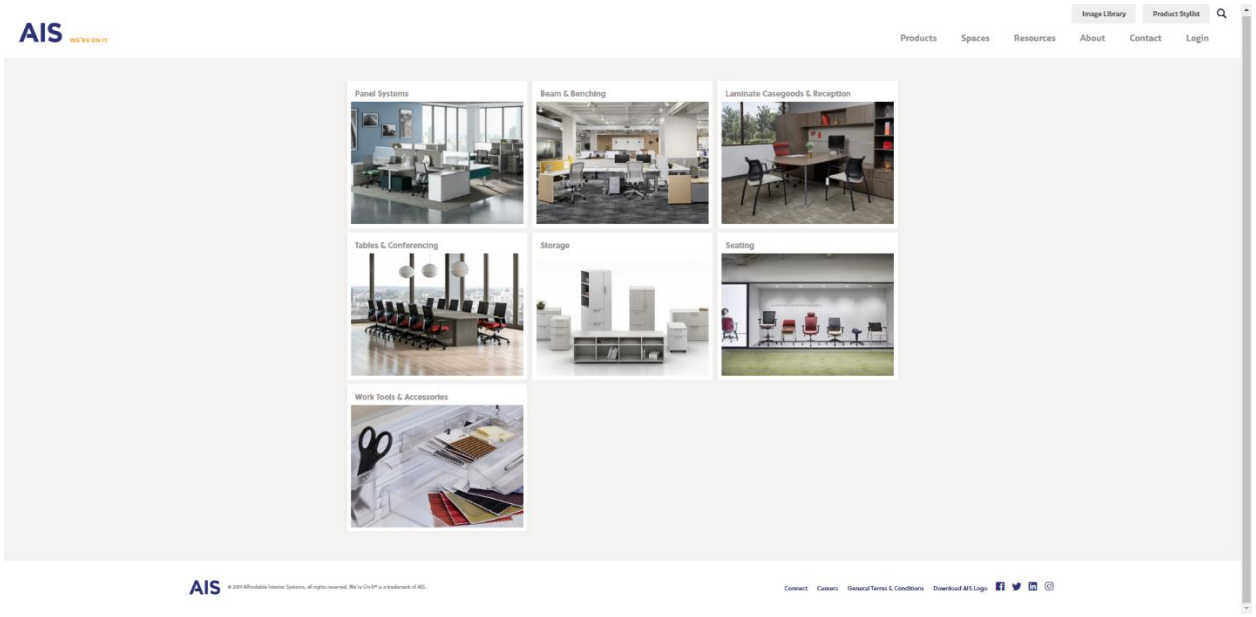
Any participating agency is welcome to work with our accounting department to perform necessary audits to confirm compliance with the Master Agreement.

In addition to working with our authorized dealer network, Participating agencies will have a Master Agreement dedicated website that will house all pertinent and useful information required by Region 4 ESC and OMNIA customers. This website will feature:

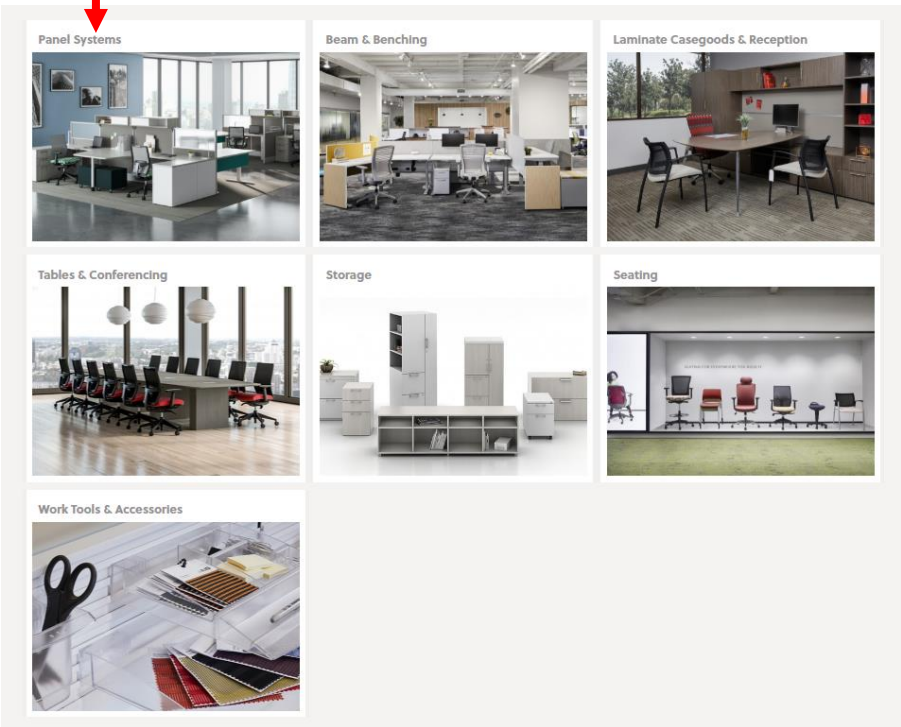
- Product offering
- Program discounts
- Price lists to verify list pricing
- Product information
- AIS representatives list
- Search capability to find a local dealer and showrooms
- Image library with thousands of images of our products
- Idea starters
- Colors, materials, finishes to choose from for product lines
- Environmental/sustainability information
- Warranty information
- Ability to check order status
- Design resources
- Product Stylist for seating

See example snapshots of website pages on following pages (not all above bullet points included).

Product Offering Page

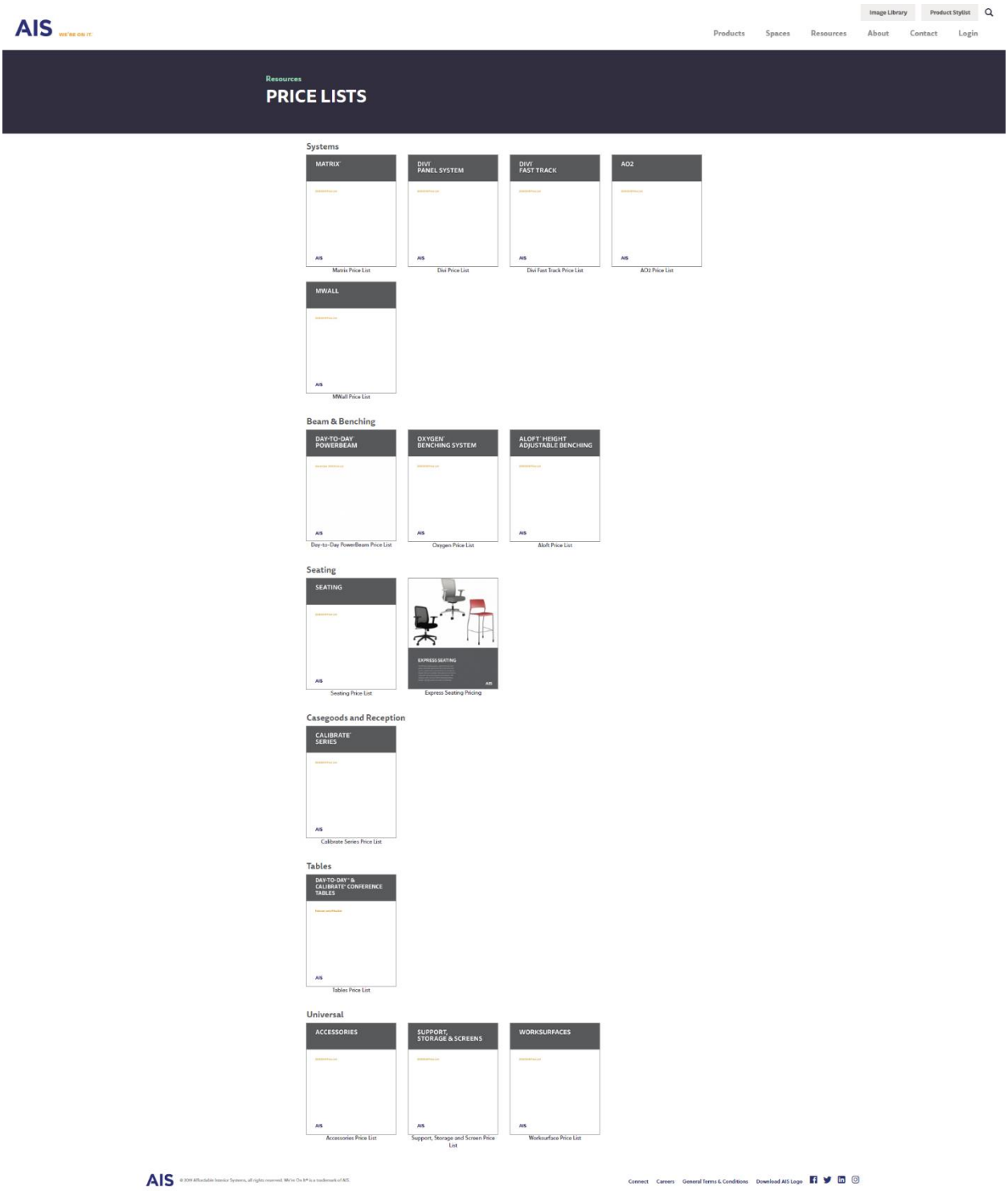


Click on the appropriate product category square to be navigated to desired product categories.

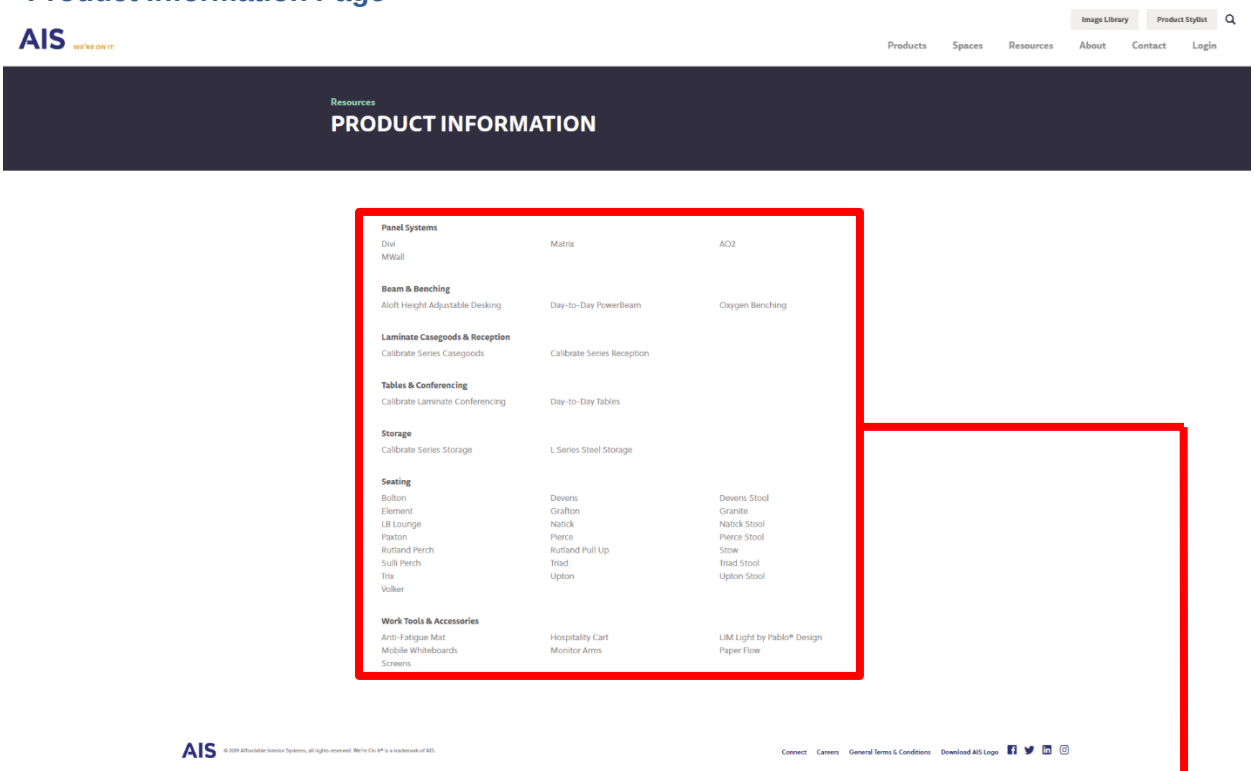


Price Lists Page

Click on the appropriate price list to verify list pricing.



Product Information Page



Click on the product line for which additional product information is needed

Panel Systems

Divi	Matrix	AO2
MWall		

Beam & Benching

Aloft Height Adjustable Desking	Day-to-Day PowerBeam	Oxygen Benching

Laminate Casegoods & Reception

Calibrate Series Casegoods	Calibrate Series Reception

Tables & Conferencing

Calibrate Laminate Conferencing	Day-to-Day Tables

Storage

Calibrate Series Storage	L Series Steel Storage

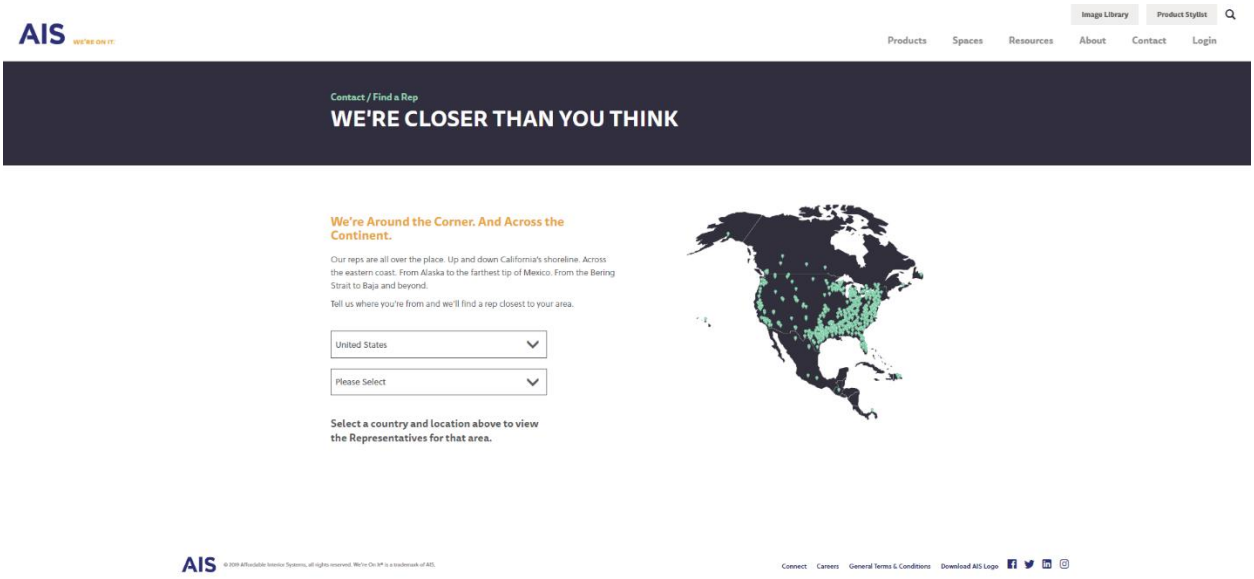
Seating

Bolton	Devens	Devens Stool
Element	Grafton	Granite
LB Lounge	Natick	Natick Stool
Paxton	Pierce	Pierce Stool
Rutland Perch	Rutland Pull Up	Stow
Sulli Perch	Triad	Triad Stool
Trix	Upton	Upton Stool
Volker		

Work Tools & Accessories

Anti-Fatigue Mat	Hospitality Cart	LIM Light by Pablo® Design
Mobile Whiteboards	Monitor Arms	Paper Flow
Screens		

Find an AIS Representative Page



Select appropriate location in drop down menu to find a local AIS representative

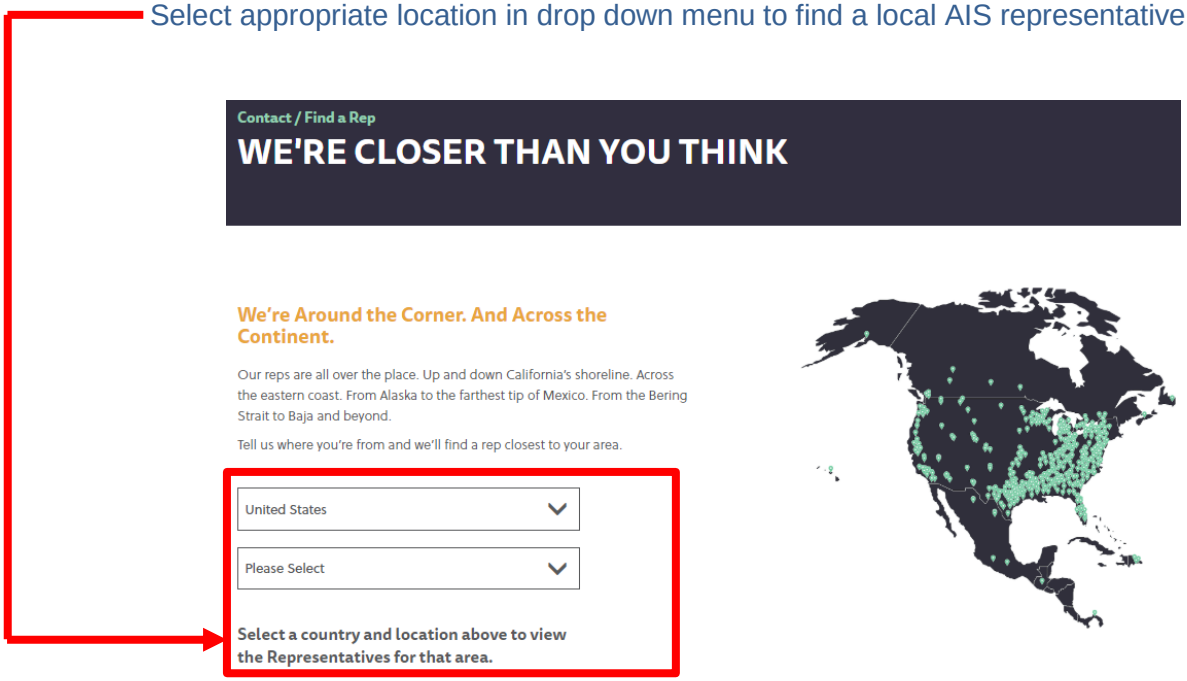
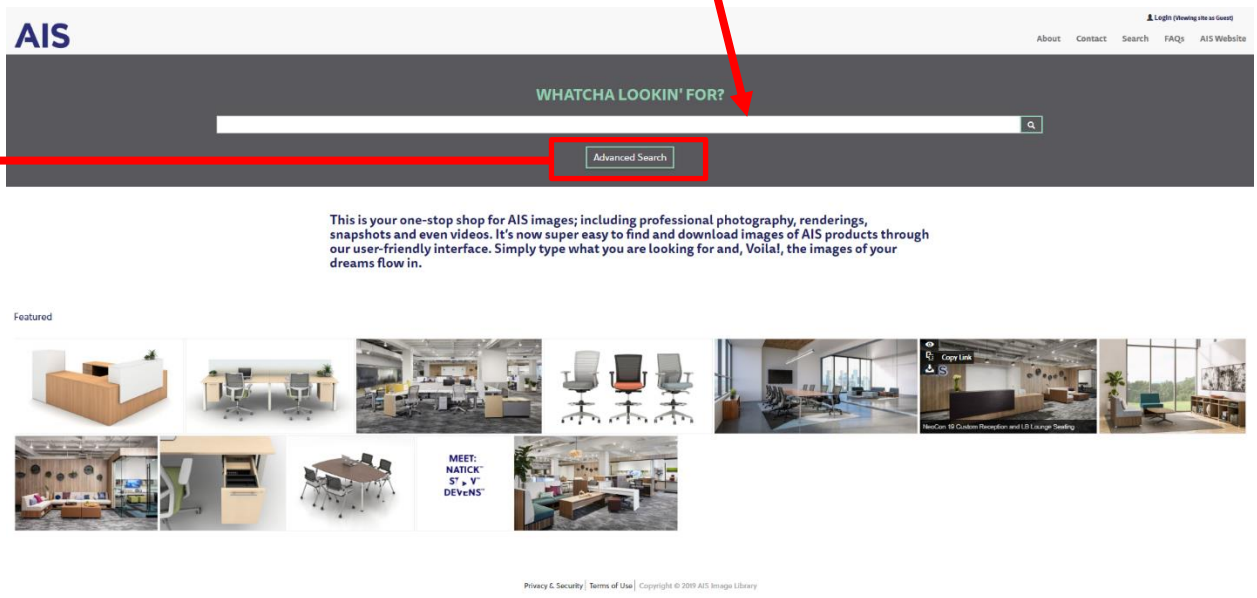
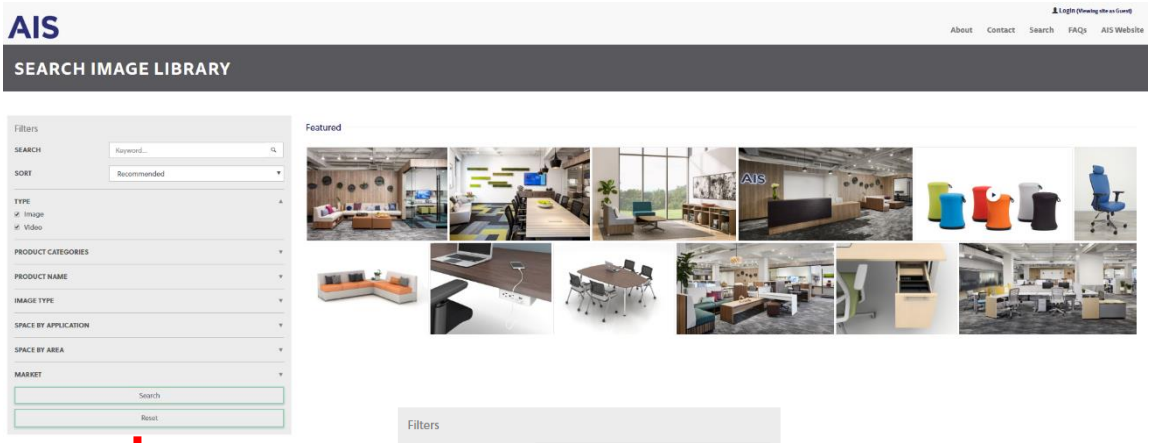


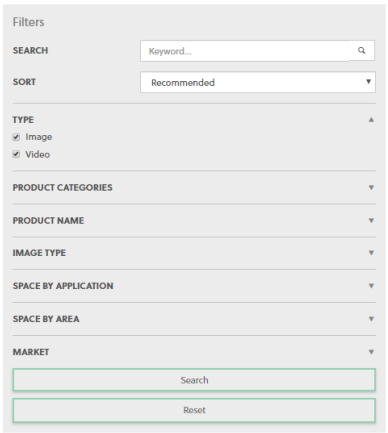
Image Library Page

Type in a description of what you would like to see



Or used the Advanced Search feature to use the below filter options to populate the desired image





Filter by:

- Product Categories
- Product Name
- Image Type
- Space by Application
- Space by Area
- Market

D. Identify all other companies that will be involved in processing, handling or shipping the products/service to the end user.

AIS works through a network of over 1,000 dealer service providers across North America. These dealers will work with the end users to identify project specifications, delivery and installation needs.

Once the project scope has been defined through specification, the purchase order is sent to AIS's Data Entry team. The Data Entry team process the order for manufacturing. After the order is built, AIS shipping team will coordinate logistics using third party shipping carriers. Depending on size the size of the order/number of pallets AIS will arrange either a dedicated Full Truck load carrier or a shared shipping carrier or LTL.

During the specification process the dealer and AIS will work with the end user to select a certified AIS installer to assist with product installation within the customer's facility.

E. Provide the number, size and location of Supplier's distribution facilities, warehouses and retail network as applicable.

AIS operates both its manufacturing and administrative facilities under the same roof in our 600,000 sq/ft headquarters facility located in Leominster, MA. This facility features a newly updated and expanded showroom. Additionally, AIS operates an additional 550,000 sq/ft private label OEM facility in Cameron, TX.



AIS has permanent showrooms at its Leominster headquarters and also in Chicago, New York City and Washington, D.C. With locations across the U.S., AIS has more than 800 employees and over 1 million square feet of office, showroom and factory space. Additional showrooms are located in various cities throughout the US including Pittsburg, Buffalo, Atlanta, Phoenix, Salt Lake City, Philadelphia, Denver, San Francisco managed through AIS Representatives.

All of our over 1000 authorized dealers have access to warehouses to receive furniture shipments and store product until ready for furniture install date.

3.3 Marketing and Sales

A. Provide a detailed ninety-day plan beginning from award date of the Master Agreement describing the strategy to immediately implement the Master Agreement as supplier's primary go to market strategy for Public Agencies to supplier's teams nationwide, to include, but not limited to:

i. Executive leadership endorsement and sponsorship of the award as the public sector as the public sector go-to-market strategy within the first 10 days
ii. Training and education of Supplier's national sales force with participation from the Supplier's executive leadership, along with the OMNIA Partners, Public Sector team within the first 90 days

Following AIS's standard Program Launch Plan, the executive leadership team will immediately define the messaging document and position statement for both internal stakeholders and internal and external audiences. The positioning document will include the overview of the Omnia contract and how AIS can provide workspace solutions for its customers.

AIS has been successful over the years launching national contract initiatives. AIS currently holds a GSA Contract that has been in place for almost twenty years. This has enabled AIS to market directly to the Department of Defense as well as civilian agencies nationwide. AIS has been recognized for our excellence in supporting the needs of the Federal marketplace by not only GSA but from many DOD and agencies. We are a BPA holder with the US Navy supporting the Spiral II Navy BPA program. It has been AIS' belief that in order to support contracts such as these, a targeted and successful program launch is key in gaining immediate awareness and developing success.

First 10 Days

- Once an award is made to AIS, we will distribute a company-wide announcement to announce our OMNIA Partners, public sector award and what the award means to the AIS sales efforts nationwide. The email will detail the business sectors that this contract will target and provide a timeline for the field sales launch effort.

- Send out an announcement of award to our dealer distribution and map out timeline of launch to our dealer distribution.

- Conference call coinciding with a webinar will be set up with our field sales group to introduce OMNIA Partners, public sector and what it means to AIS from a new business development perspective. Provide an overview of the contract itself, rolls and responsibilities, reporting, business development efforts and communication roll out to our dealer distribution. (Invite POC from OMNIA to participate in this call if interested)

First 90 Days

- Distribute launch packages to field sales by region with identified target accounts to penetrate and introduce with direct representation AIS and OMNIA contract.

- Distribute launch packages to dealer distribution which outlines OMNIA program and provide additional secondary target accounts identified by region and allow dealers to make contact and introduce AIS and OMNIA contract.

- Initiate email campaign to end users to get the word out on OMNIA award and AIS participation.

- All this would be implemented within 30 days of award by OMNIA.

Post 90 days

- Continue to uncover potential users and introduce OMNIA contract as a channel of procurement for their business segment.

- Repeat marketing emails and communications on a monthly basis with flyers and highlighted products from the OMNIA Partners, public sector contract to draw continued interest.

B. Provide a detailed ninety-day plan beginning from award date of the Master Agreement describing the strategy to market the Master Agreement to current Participating Public Agencies, existing Public Agency customers of Supplier, as well as to prospective Public Agencies nationwide immediately upon award, to include, but not limited to:

i. Creation and distribution of a co-branded press release to trade publications
ii. Announcement, Master Agreement details and contact information published on the Supplier's website within first 90 days
iii. Design, publication and distribution of co-branded marketing materials within first 90 days
iv. Commitment to attendance and participation with OMNIA Partners, Public Sector at national (i.e. NIGP Annual Forum, NPI Conference, etc.), regional (i.e. Regional NIGP Chapter Meetings, Regional Cooperative Summits, etc.) and supplier-specific trade shows, conferences and meetings throughout the term of the Master Agreement
v. Commitment to attend, exhibit and participate at the NIGP Annual Forum in an area reserved by OMNIA Partners, Public Sector for partner suppliers. Booth space will be purchased and staffed by Supplier. In addition, Supplier commits to provide reasonable assistance to the overall promotion and marketing efforts for the NIGP Annual Forum, as directed by OMNIA Partners, Public Sector.
vi. Design and publication of national and regional advertising in trade publications throughout the term of the Master Agreement
vii. Ongoing marketing and promotion of the Master Agreement throughout its term (case studies, collateral pieces, presentations, promotions, etc.)
viii. Dedicated OMNIA Partners, Public Sector internet web-based homepage on Supplier's website with:

- OMNIA Partners, Public Sector standard logo;
- Copy of original Request for Proposal;
- Copy of Master Agreement and amendments between Principal Procurement Agency and Supplier;
- Summary of Products and pricing;
- Marketing Materials
- Electronic link to OMNIA Partners, Public Sector's website including the online registration page;
- A dedicated toll-free number and email address for OMNIA Partners, Public Sector

Upon award, AIS will draft a co-branded press release to announce to the trade publications, including Monday Morning Quarterback, Office Insight, Business of Furniture and any other industry trade publications that may choose to publish the release. The draft announcement will be sent to OMNIA partners for final approval before release.

AIS will publish the approved OMNIA partnership announcement on AIS's public website and post the master agreement and contract details within the contract section of the website, to be easily accessed by dealers and OMNIA partner customers, within 90 days of award.

The AIS Marketing and Contract team will create a program email announcement, social media, brochure, internal and external training presentation to share with AIS team members, dealers and OMNIA partners. Upon approval from the OMNIA team, these communications and materials will be released to publicly. These materials will be completed within 90 days of contract award.

AIS sales representatives and sales leaders will attend regional NIGP chapter meetings and summits in their respective regions and areas. The goal to attend these shows would be to make connections with purchasing decision makers who are involved with OMNIA partners or looking for a partner supplier solution. Follow up, post event will be made by AIS team members to ensure needs are met with AIS or OMNIA partners.

AIS will attend the annual NIGP Forum in Chicago, IL in August 2020. AIS's booth space will include AIS's most relevant products and will be staffed by our regional sales team. AIS will promote the NIGP Forum prior to the event to any pre-registered attendees, AIS dealers, designers and influencers. During the show, AIS will post on social media our participation and activities happening throughout the event.

Post show follow up will include communications to all show attendees. AIS representatives will receive contact information for anyone who visits the AIS booth and wishes to learn more or has an opportunity for an AIS solution. These attendees will be contacted within 48 hours after the show, if not sooner.

The AIS Marketing team will work with our creative partners and graphic design team to create advertising in appropriate trade publications, dealer network communications and social media connections.

AIS will continue to update OMNIA partner brochures and program presentations with client case studies including install photos, project overviews and testimonials. We will continue to reach out to AIS dealers and OMNIA partner contacts with new product and program introductions and promotions through email blasts, newsletters and social media channels.

AIS will create a website homepage accessed from www.ais-inc.com that will be co-branded for OMNIA partners, Public Sector and AIS. This website will include a link to a pdf copy of the original RFP and Master Agreement and amendments. There will be links to the products offered on the OMNIA partner agreement including brochures, price lists, idea starters, fabrics and finishes, product stylist, spaces by application, image library and specification resources. AIS's toll-free number, 800.434.7400, and contact email address, info@ais-inc.com, for OMNIA Partners will be available on this site.

Additionally, this web page will link to OMNIA Partners, Public Sector website and online registration page.

C. Describe how Supplier will transition any existing Public Agency customers' accounts to the Master Agreement available nationally through OMNIA Partners, Public Sector. Include a list of current cooperative contracts (regional and national) Supplier holds and describe how the Master Agreement will be positioned among the other cooperative agreements.

AIS must remain compliant with existing federal, state and local contracts. When applicable, AIS will make the recommendation to use the Master Agreement. We recognize the multiple benefits to utilizing the Master Agreement. AIS will position the Master Agreement with a higher incentive to authorized dealers for using the Master Agreement.

Current cooperative contracts include:

- GSA
- Navy BPA
- NCPA
- TIPS
- Haworth GPO (Vizient, Premier, Intalere, HealthTrust & Greenhealth Exchange)
- Massachusetts Higher Education Consortium (MHEC)
- Illinois Public Higher Education Cooperative (IPHEC)
- State of AL
- University of AL
- State of AR
- CMAS
- State of CT
- State of FL
- State of GA
- State of KS
- University of KY
- State of MA
- State of MS
- State of NJ
- State of NM
- State of NY
- State of NC
- State of PA
- State of SC
- State of SD
- TXMAS

D. Acknowledge Supplier agrees to provide its logo(s) to OMNIA Partners, Public Sector and agrees to provide permission for reproduction of such logo in marketing communications and promotions. Acknowledge that use of OMNIA Partners, Public Sector logo will require permission for reproduction, as well.

AIS agrees to provide its logo(s), as well as branding guidelines to OMNIA Partners, Public Sector and will grant permission for reproduction of such logo in marketing communications and promotions. AIS will obtain permission from OMNIA Partners, Public Sector to use its logo for reproduction purposes.

E. Confirm Supplier will be proactive in direct sales of Supplier's goods and services to Public Agencies nationwide and the timely follow up to leads established by OMNIA Partners, Public Sector. All sales materials are to use the OMNIA Partners, Public Sector logo. At a minimum, the Supplier's sales initiatives should communicate:

i. Master Agreement was competitively solicited and publicly awarded by a Principal Procurement Agency

ii. Best government pricing
iii. No cost to participate
iv. Non-exclusive

AIS will be proactive in direct sales of good and services to Public Agencies nationwide. We will follow up on leads established by OMNIA Partners, Public Sector in a timely manner within 24 hours. AIS will obtain permission for use of OMNIA Partners, Public Sector logo and upon approval will use it on all sales materials. All sales material will include the above listed four (4) advantages to the OMNIA Partners contract.

F. Confirm Supplier will train its national sales force on the Master Agreement. At a minimum, sales training should include:

i. Key features of Master Agreement
ii. Working knowledge of the solicitation process
iii. Awareness of the range of Public Agencies that can utilize the Master Agreement through OMNIA Partners, Public Sector
iv. Knowledge of benefits of the use of cooperative contracts

AIS will train our national sales force on the Master Agreement via various methods. The training will include a sales presentation that will at a minimum address the above four (4) items. This sales presentation will serve as a sales tool that can by used by AIS representatives and our authorized dealers to present to interested agencies, as well as end users.

The outline for the sales presentation is below.

1. OMNIA Partners Overview
    a. Key features of Master Agreement
    b. General listing of who can utilize the Master Agreement with link to full listing of approved agencies
    c. Benefits to use the Master Agreement
2. General Information for Master Agreement
    a. Contract #
    b. Contract Term
    c. Products on Contract
    d. Price Lists to Use
    e. Design specification information
    f. Freight information
    g. Services and the Service Rates
3. Solicitation Process
    a. Verification of agency's qualification to use the Master Agreement with link to, "How to become a OMNIA Partners Approved Agency"
    b. Authorized dealer proposal/quote requirements
    c. Required items to be listed on agency PO (Who the PO is made out to, contract #, etc.)
4. AIS Order Entry Requirements
    a. Documentation requirements
    b. Important information (ship to address, requested ship date, etc.)
5. Invoicing Process
6. AIS OMNIA Partners Master Agreement Team (lists AIS points of contact)
7. Frequently Asked Questions (FAQ)

a. Include questions and answers on Master Agreement
b. Include links to Master Agreement resources (OMNIA website, Approved agency list, etc.)

G. Provide the name, title, email and phone number for the person(s), who will be responsible for:

i. Executive Support
ii. Marketing
iii. Sales
iv. Sales Support
v. Financial Reporting
vi. Accounts Payable
vii. Contracts

a. Executive Support:
Nick Haritos, Executive Vice President Sales & Distribution
nharitos@ais-inc.com
617.259.4214

b. Marketing:
Tracy Reed, Vice President of Marketing
treed@ais-inc.com
616.610.7036

c. Sales
Nick Haritos, Executive Vice President Sales & Distribution
nharitos@ais-inc.com
617.259.4214

d. Sales Support
Amy Transue, Director of Marketing & Strategic Resources
atransue@ais-inc.com
978.567.5122

e. Financial Reporting
James Wiley, Financial Analyst/Senior Accountant
jwiley@ais-inc.com
978.567.5137

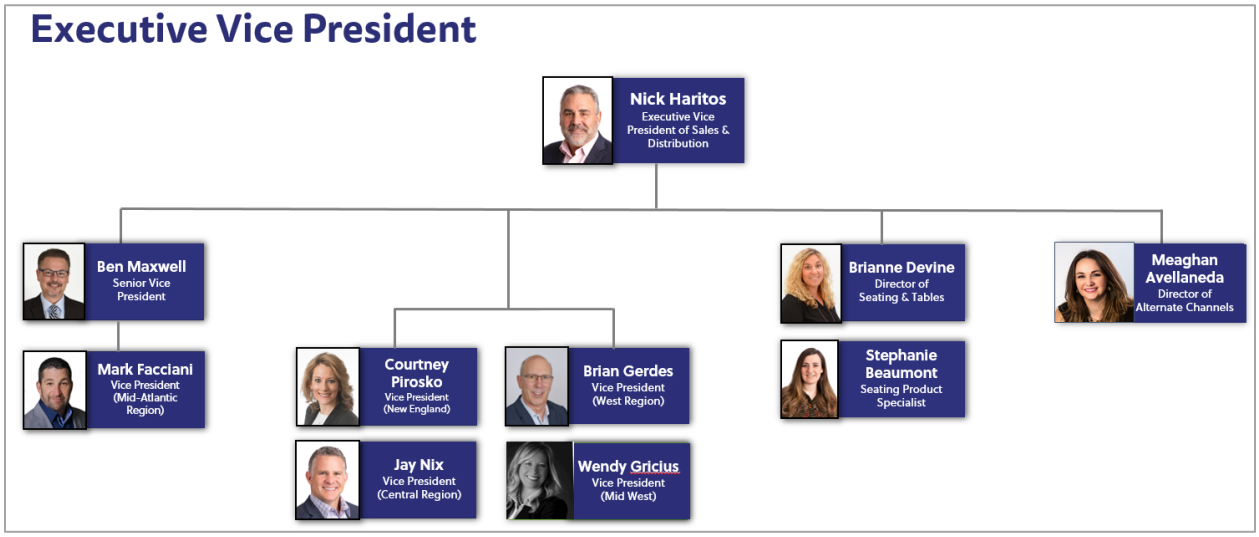
f. Accounts Payable
Konny Ly Braga, Accounts Payable Coordinator
kbraga@ais-inc.com
978.567.5174

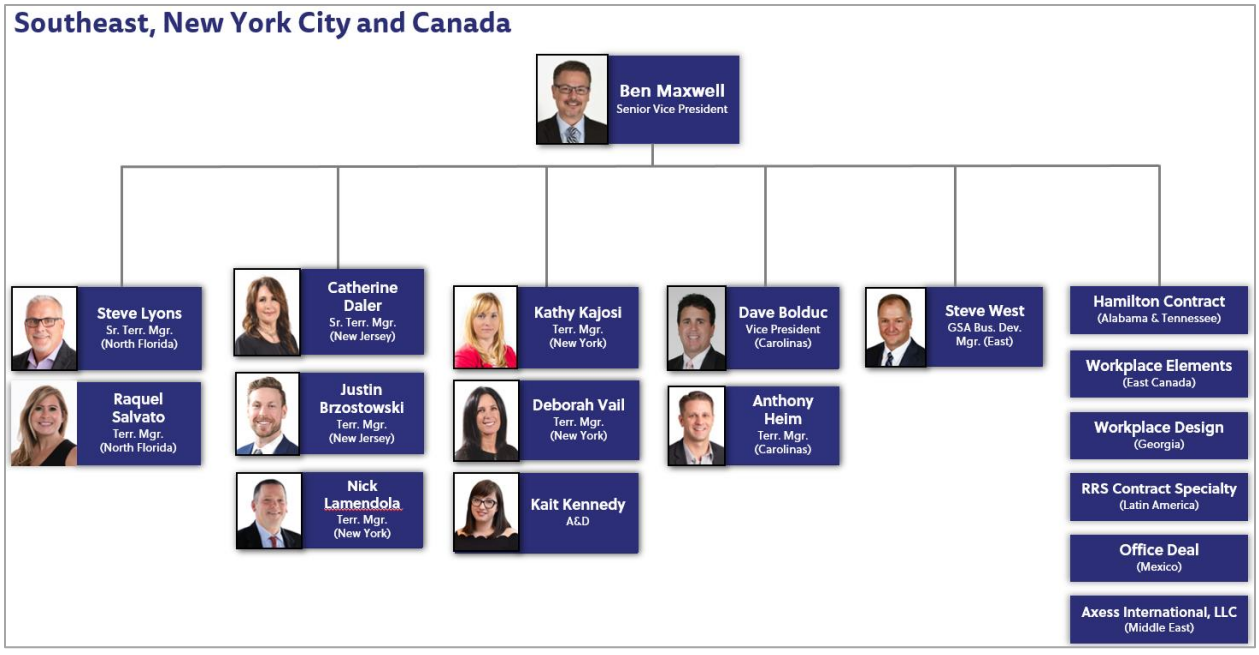
g. Contracts
Helen Woods, Contract Specialist
hwoods@ais-inc.com
978.567.5163

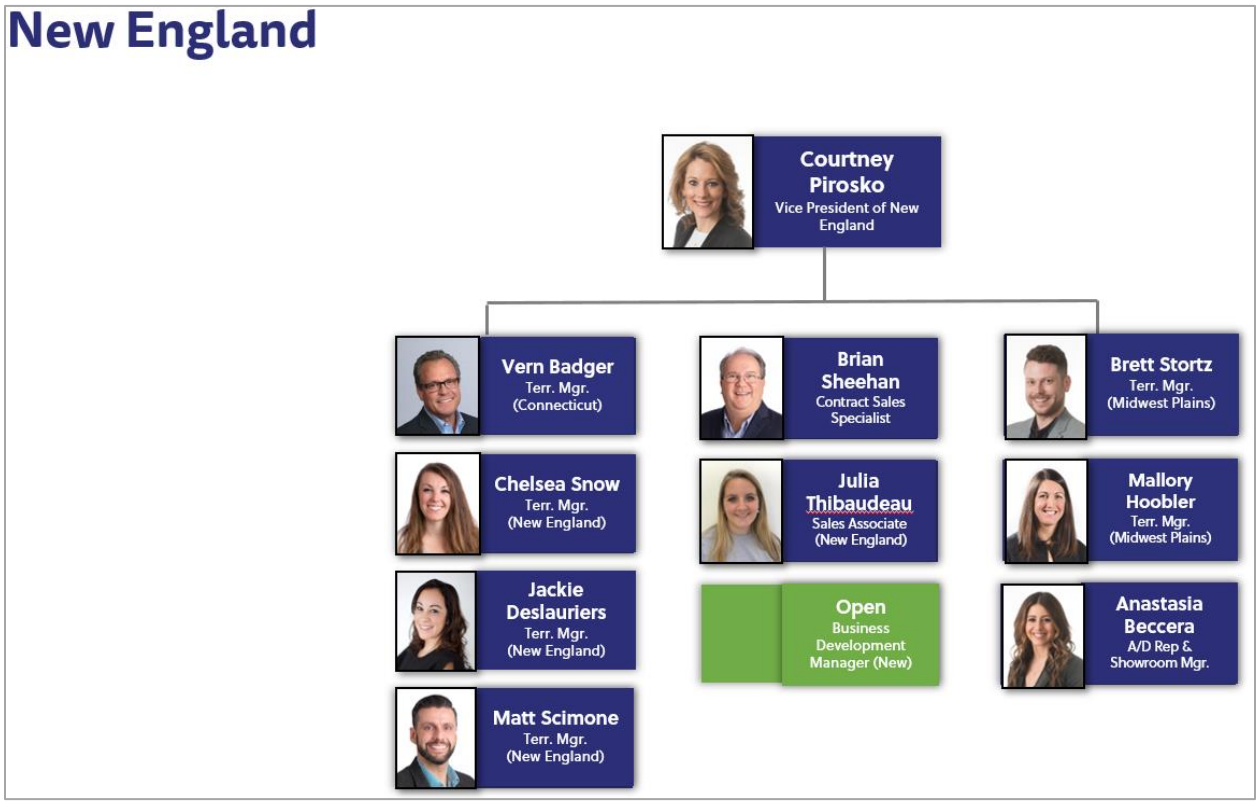
H. Describe in detail how Supplier's national sales force is structured, including contact information for the highest-level executive in charge of the sales team.

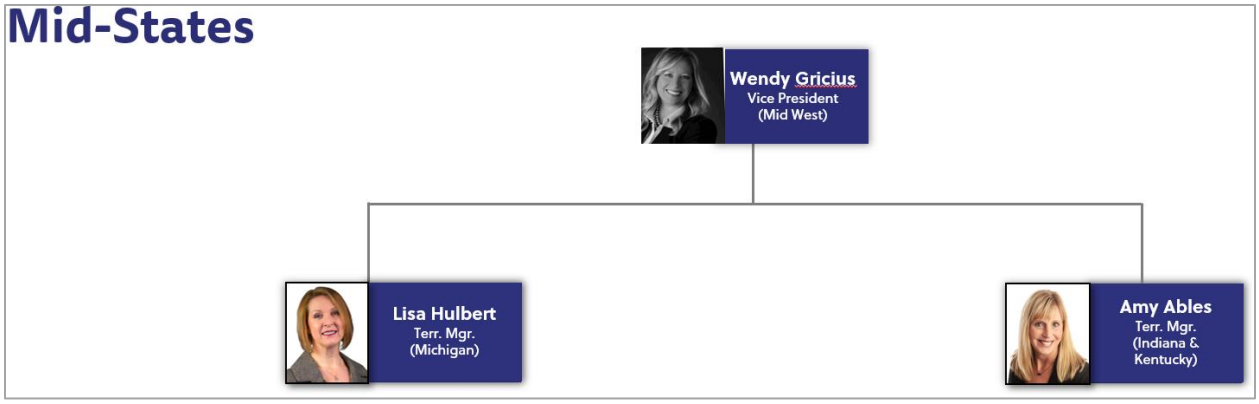
Nick Haritos, Executive Vice President, Sales & Distribution
nharitos@ais-inc.com
617.259.4214

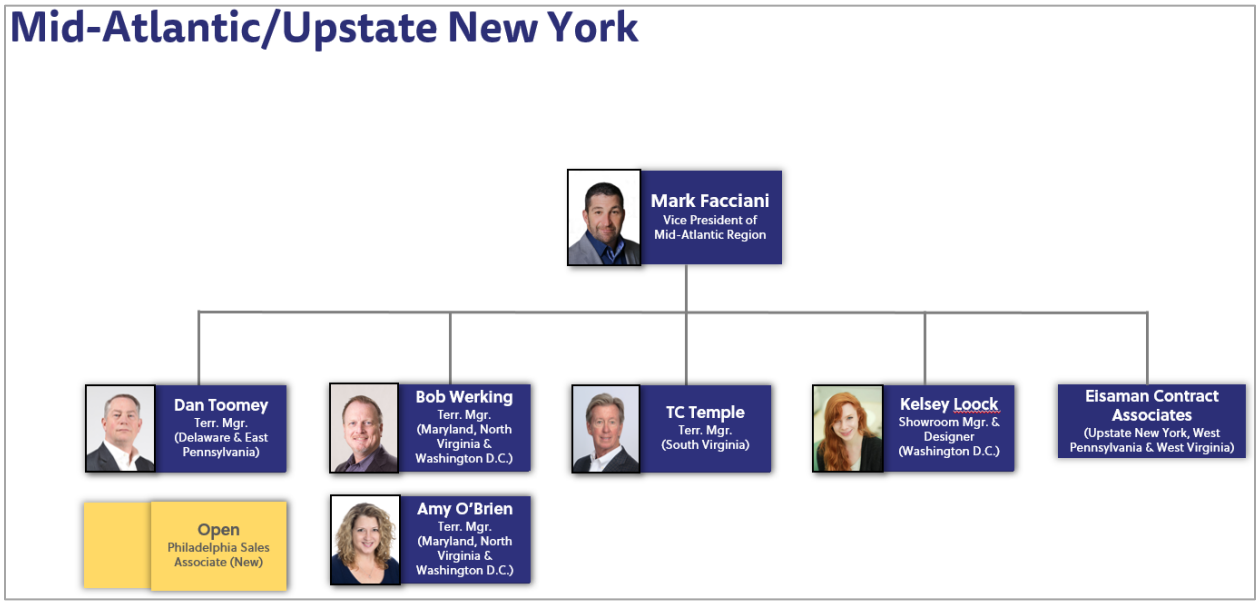
Nick Haritos is the Executive Vice President of Sales & Distribution for AIS. He manages a team of six Regional Vice Presidents who manage market six market regions in North America. These market teams are comprised of AIS direct employees, Territory Managers and Independent Representatives who are contract representatives. Below is the organization of these regions and team members. The Territory Managers and Independent Representatives manage the network of over 1,000 dealers that service end-users who are looking to specify, purchase and install AIS products.

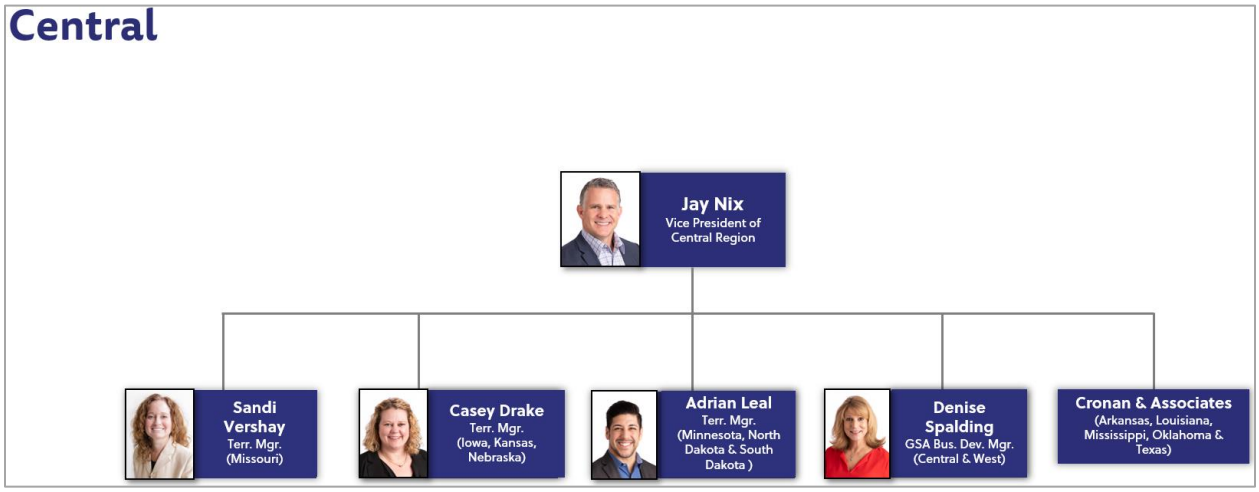


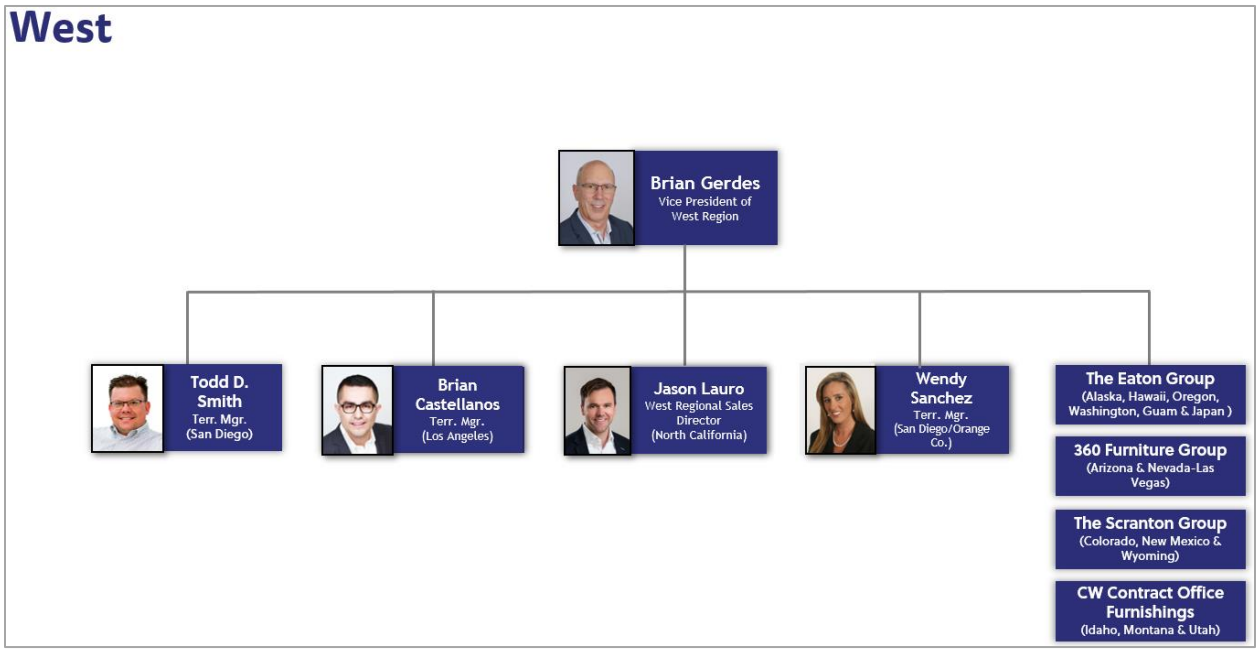



New England
Courtney Pirosko
Vice President of New England
Vern Badger
Terr. Mgr.
(Connecticut)
Brian Sheehan
Contract Sales Specialist
Brett Stortz
Terr. Mgr.
(Midwest Plains)
Chelsea Snow
Terr. Mgr.
(New England)
Julia Thibaudeau
Sales Associate
(New England)
Mallory Hoobler
Terr. Mgr.
(Midwest Plains)
Jackie Deslauriers
Terr. Mgr.
(New England)
Open
Business Development Manager (New)
Anastasia Beccera
A/D Rep & Showroom Mgr.
Matt Scimone
Terr. Mgr.
(New England)


Mid-States
Wendy Gricius
Vice President
(Mid West)
Lisa Hulbert
Terr. Mgr.
(Michigan)
Amy Ables
Terr. Mgr.
(Indiana & Kentucky)


Mid-Atlantic/Upstate New York
Mark Facciani
Vice President of Mid-Atlantic Region
Dan Toomey
Terr. Mgr. (Delaware & East Pennsylvania)
Bob Werking
Terr. Mgr. (Maryland, North Virginia & Washington D.C.)
TC Temple
Terr. Mgr. (South Virginia)
Kelsey Loock
Showroom Mgr. & Designer (Washington D.C.)
Elsaman Contract Associates
(Upstate New York, West Pennsylvania & West Virginia)
Open
Philadelphia Sales Associate (New)
Amy O'Brien
Terr. Mgr. (Maryland, North Virginia & Washington D.C.)


Central
Jay Nix
Vice President of Central Region
Sandi Vershay
Terr. Mgr. (Missouri)
Casey Drake
Terr. Mgr. (Iowa, Kansas, Nebraska)
Adrian Leal
Terr. Mgr. (Minnesota, North Dakota & South Dakota)
Denise Spalding
GSA Bus. Dev. Mgr. (Central & West)
Cronan & Associates
(Arkansas, Louisiana, Mississippi, Oklahoma & Texas)



I. Explain in detail how the sales teams will work with the OMNIA Partners, Public Sector team to implement, grow and service the national program.

AIS Executive Team to work alongside Omnia Executive Team/Directors to ensure nationwide training efforts are rolled out timely and effectively once contract is awarded. AIS Field Sales Team will partner with respective Omnia Regional Managers and Directors to ensure new supplier product offering is communicated to Members via face to face meetings as time permits, printed catalog distribution as well as a digital catalog offering. AIS to attend ongoing Premiere Cooperative Purchasing Events - Regional Connections once 2020 schedule is released. AIS Sales Team and authorized dealers to proactively call on agencies in tandem to generate new business and follow up on leads.

AIS will proactively survey our completed Omnia furniture projects and create case studies (large and small) on an annual basis to ensure Omnia Partners has fresh, digital content with professional photography. These mutually created co-branded case studies would be utilized by AIS and Omnia Partners for marketing and social media campaigns to increase brand awareness, grow sales and ultimately grow Omnia Partner memberships of all sizes in each region.

J. Explain in detail how Supplier will manage the overall national program throughout the term of the Master Agreement, including ongoing coordination of marketing and sales efforts, timely new Participating Public Agency account set-up, timely contract administration, etc.

AIS's will have a dedicated team supporting the management and growth of the OMNIA Partners, Public Sector program. Sales leadership will ensure ongoing national sales team training, networking and prospecting through quarterly AIS sales team webinars, monthly sales leadership conference calls, weekly sales team meetings and weekly one on one meetings.

Continued Marketing efforts will include broad promotion of AIS through trade publications, event marketing, direct target promotion and social media campaigns. As new product and programs

are introduced to the commercial market, a special dedicated campaign will also be targeted directly to OMNIA Partner customers.

Internal contract management will continue to educate support, reporting and customer service teams on account setup. As any changes are administered through OMNIA Partners, the AIS team will effectively communicate throughout the organization through documented process updates, webinar and live meeting trainings.

K. State the amount of Supplier's Public Agency sales for the previous fiscal year. Provide a list of Supplier's top 10 Public Agency customers, the total purchases for each for the previous fiscal year along with a key contact for each.

Our state agency sales equate to over $7MM last year in 2018. In 2018, our GSA sales were approximately $9MM.

No.	Public Agency	Total Purchases	Key Contact
1	State of New Jersey - Department of Children & Family	$1,104,495	Susan Santiago
2	State of New Jersey - Property Rentals	$512,789	N/A
3	State of New Jersey - Camden County Courthouse	$403,449	Glen Stranix
4	Cumberland County Improvement Authority	$369,468	Roseanne Duffy
5	State of New Jersey - Superior Courts	$348,667	Joanne Diego
6	State of New York - Onondaga County Facilities	$340,756	Julie McCarthy
7	Naval Surface Warfare Center at Navy Activity Station - Crane, IN	$200,000	Morgan Hughes
8	State of New York - Nassau County	$195,341	Margaret Reynolds
9	State of New Jersey - Atlantic County Civic Court Building	$153,404	Glen Stranix
10	State of NJ Dept of Labor - Division of Unemployment Insurance	$127,393	Marcia Szedula
	Total State of New Jersey agency sales for 2018	*$2.8MM*	*Ben Maxwell*
	Total State of New York agency sales for 2018	*$2.6MM*	*Ben Maxwell*

L. Describe Supplier's information systems capabilities and limitations regarding order management through receipt of payment, including description of multiple platforms that may be used for any of these functions.

Orders may be submitted to AIS via email, fax or through electronic upload submission through the website. Order formats can be pdf, SIF/SP4 and XML.

AIS accepts company check, direct deposit, ACH, wire transfer and credit cards (except for Discover card) as form of payment.

M. Provide the Contract Sales (as defined in Section 10 of the OMNIA Partners, Public Sector Administration Agreement) that Supplier will guarantee each year under the Master Agreement for the initial three years of the Master Agreement ("Guaranteed Contract Sales").

$_____.00 in year one
$_____.00 in year two
$_____.00 in year three

To the extent Supplier guarantees minimum Contract Sales, the administration fee shall be calculated based on the greater of the actual Contract Sales and the Guaranteed Contract Sales.

AIS is confident that our sales and distribution network will generate significant sales throughout North America as we have done with our GSA and other GPO contracts. We would welcome the opportunity to negotiate an additional incentive after year one of our contract is completed as it relates to guaranteed incentive. Historical data is essential to ensure that we put the appropriate minimum contract sales in place.

N. Even though it is anticipated many Public Agencies will be able to utilize the Master Agreement without further formal solicitation, there may be circumstances where Public Agencies will issue their own solicitations. The following options are available when responding to a solicitation for Products covered under the Master Agreement.

i. Respond with Master Agreement pricing (Contract Sales reported to OMNIA Partners, Public Sector).

   If solicitation does not specify which contracts are to be utilized, AIS will respond with the Master Agreement pricing and will report Master Agreement sales to OMNIA Partners, Public Sector. AIS will electronically provide the OMNIA Partners, Public Sector Contract Sales Monthly Report using the issued OMNIA Partners, Public Sector Exhibit C, Contract Sales Reporting Template in Microsoft Excel format.

   In the event items are returned (pre-approval required) credits on administrative fees will be deducted from the following month's reporting as a reconciliation and noted in report details.

ii. If competitive conditions require pricing lower than the standard Master Agreement not-to-exceed pricing, Supplier may respond with lower pricing through the Master Agreement. If Supplier is awarded the contract, the sales are reported as Contract Sales to OMNIA Partners, Public Sector under the Master Agreement.

   If utilizing the Master Agreement and the competitive solicitation environment is such that requires us to offer deeper discounting to an agency to secure award, AIS will report the sales to OMNIA Partners, Public Sector in compliance with the Master Agreement.

iii. Respond with pricing higher than Master Agreement only in the unlikely event that the Public Agency refuses to utilize Master Agreement (Contract Sales are not reported to OMNIA Partners, Public Sector).

   AIS may respond with pricing that is higher than that of the Master Agreement and will report these sales as necessary to the appropriate contract agency, if applicable.

iv. If alternative or multiple proposals are permitted, respond with pricing higher than Master Agreement, and include Master Agreement as the alternate or additional proposal.

   If an alternate proposal is acceptable, AIS will provide an option utilizing the Master Agreement pricing. If the Master Agreement pricing is favorable and results in a contract, AIS will report the sales to OMNIA Partners, Public Sector.

Detail Supplier's strategies under these options when responding to a solicitation.

Appendix B

TERMS & CONDITIONS ACCEPTANCE FORM

Signature on the Offer and Contract Signature form certifies complete acceptance of the terms and conditions in this solicitation and draft Contract except as noted below with proposed substitute language (additional pages may be attached, if necessary). The provisions of the RFP cannot be modified without the express written approval of Region 4 ESC. If a proposal is returned with modifications to the draft Contract provisions that are not expressly approved in writing by Region 4 ESC, the Contract provisions contained in the RFP shall prevail.

Check one of the following responses:

☐ Offeror takes no exceptions to the terms and conditions of the RFP and draft Contract.

(*Note: If none are listed below, it is understood that no exceptions/deviations are taken.)*

☒ Offeror takes the following exceptions to the RFP and draft Contract. All exceptions must be clearly explained, reference the corresponding term to which Offeror is taking exception and clearly state any proposed modified language, proposed additional terms to the RFP and draft Contract must be included:

(*Note: Unacceptable exceptions may remove Offeror's proposal from consideration for award. Region 4 ESC shall be the sole judge on the acceptance of exceptions and modifications and the decision shall be final.*

If an offer is made with modifications to the contract provisions that are not expressly approved in writing, the contract provisions contained in the RFP shall prevail.)

Section/Page	Term, Condition, or Specification	Exception/Proposed Modification	Accepted (For Region 4 ESC's use)
Appendix A, #14 Page 4	Delivery. Conforming product shall be shipped within 7 days of receipt of Purchase Order. If delivery is not or cannot be made within this time period, the Contractor must receive authorization for the delayed delivery. The order may be canceled if the estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. Destination and shall be included in all pricing offered unless otherwise clearly stated in writing.	Delivery. Conforming product shall be shipped ~~within 7 days of receipt of Purchase Order~~ within the timeframe mutually agreed to by the Vendor and the purchasing agency. If delivery is not or cannot be made within this time period, the Contractor must receive authorization for the delayed delivery. The order may be canceled if the estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. Destination and shall be included in all pricing offered unless otherwise clearly stated in writing.	

Exhibit F, Federal Certifications, Page 40 of 55	CERTIFICATION OF COMPLIANCE WITH BUY AMERICA PROVISIONS To the extent purchases are made with Federal Highway Administration, Federal Railroad Administration, or Federal Transit Administration funds, offeror certifies that its products comply with all applicable provisions of the Buy America Act and agrees to provide such certification or applicable waiver with respect to specific products to any Participating Agency upon request. Purchases made in accordance with the Buy America Act must still follow the applicable procurement rules calling for free and open competition.	CERTIFICATION OF COMPLIANCE WITH BUY AMERICA PROVISIONS To the extent purchases are made with Federal Highway Administration, Federal Railroad Administration, or Federal Transit Administration funds, vendor may be requested to certify individual product compliance ~~offeror certifies that its products comply~~ with all applicable provisions of the Buy America Act. ~~and~~ Vendor agrees to provide such certification or applicable waiver with respect to specific products to any Participating Agency upon request. It is the responsibility of the Purchasing Agency to notify the Vendor that requested product(s) must adhere to the Buy America Act. Purchases made in accordance with the Buy America Act must still follow the applicable procurement rules calling for free and open competition.	
2.2 Pricing Commitment, Page 20 of 55	**Pricing Commitment** Supplier commits the not-to-exceed pricing provided under the Master Agreement pricing is its lowest available (net to buyer) to Public Agencies nationwide and further commits that if a Participating Public Agency is eligible for lower pricing through a national, state, regional or local or cooperative contract, the Supplier will match such lower pricing to that Participating Public Agency under the Master Agreement.	**Pricing Commitment** Supplier commits the not-to-exceed pricing provided under the Master Agreement pricing is its lowest available (net to buyer) at the time the Vendor submits their proposal to Public Agencies nationwide and further commits that if a Participating Public Agency is eligible for lower pricing through a national, state, regional or local or cooperative contract, the Supplier will match such lower pricing to that Participating Public Agency under the Master Agreement. The “lowest, not-to-exceed pricing” shall be compared to other cooperative state and local contracts, buying the same product mix, for the same geographical areas, under the same terms and conditions.	

EXHIBIT F

FEDERAL FUNDS CERTIFICATIONS

FEDERAL CERTIFICATIONS

ADDENDUM FOR AGREEMENT FUNDED BY U.S. FEDERAL GRANT

TO WHOM IT MAY CONCERN:

Participating Agencies may elect to use federal funds to purchase under the Master Agreement. This form should be completed and returned.

DEFINITIONS

Contract means a legal instrument by which a non–Federal entity purchases property or services needed to carry out the project or program under a Federal award. The term as used in this part does not include a legal instrument, even if the non–Federal entity considers it a contract, when the substance of the transaction meets the definition of a Federal award or subaward

Contractor means an entity that receives a contract as defined in Contract.

Cooperative agreement means a legal instrument of financial assistance between a Federal awarding agency or pass-through entity and a non–Federal entity that, consistent with 31 U.S.C. 6302–6305:

(a) Is used to enter into a relationship the principal purpose of which is to transfer anything of value from the Federal awarding agency or pass-through entity to the non–Federal entity to carry out a public purpose authorized by a law of the United States (see 31 U.S.C. 6101(3)); and not to acquire property or services for the Federal government or pass-through entity's direct benefit or use;

(b) Is distinguished from a grant in that it provides for substantial involvement between the Federal awarding agency or pass-through entity and the non–Federal entity in carrying out the activity contemplated by the Federal award.

(c) The term does not include:

(1) A cooperative research and development agreement as defined in 15 U.S.C. 3710a; or

(2) An agreement that provides only:

(i) Direct United States Government cash assistance to an individual;

(ii) A subsidy;

(iii) A loan;

(iv) A loan guarantee; or

(v) Insurance.

Federal awarding agency means the Federal agency that provides a Federal award directly to a non–Federal entity

Federal award has the meaning, depending on the context, in either paragraph (a) or (b) of this section:

(a)(1) The Federal financial assistance that a non–Federal entity receives directly from a Federal awarding agency or indirectly from a pass-through entity, as described in § 200.101 Applicability; or

(2) The cost-reimbursement contract under the Federal Acquisition Regulations that a non–Federal entity receives directly from a Federal awarding agency or indirectly from a pass-through entity, as described in § 200.101 Applicability.

(b) The instrument setting forth the terms and conditions. The instrument is the grant agreement, cooperative agreement, other agreement for assistance covered in paragraph (b) of § 200.40 Federal financial assistance, or the cost-reimbursement contract awarded under the Federal Acquisition Regulations.

(c) Federal award does not include other contracts that a Federal agency uses to buy goods or services from a contractor or a contract to operate Federal government owned, contractor operated facilities (GOCOs).

(d) See also definitions of Federal financial assistance, grant agreement, and cooperative agreement.

Non–Federal entity means a state, local government, Indian tribe, institution of higher education (IHE), or nonprofit organization that carries out a Federal award as a recipient or subrecipient.

Nonprofit organization means any corporation, trust, association, cooperative, or other organization, not including IHEs, that:

(a) Is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;

(b) Is not organized primarily for profit; and

(c) Uses net proceeds to maintain, improve, or expand the operations of the organization.

Obligations means, when used in connection with a non–Federal entity's utilization of funds under a Federal award, orders placed for property and services, contracts and subawards made, and similar transactions during a given period that require payment by the non–Federal entity during the same or a future period.

Pass-through entity means a non–Federal entity that provides a subaward to a subrecipient to carry out part of a Federal program.

Recipient means a non–Federal entity that receives a Federal award directly from a Federal awarding agency to carry out an activity under a Federal program. The term recipient does not include subrecipients.

Simplified acquisition threshold means the dollar amount below which a non–Federal entity may purchase property or services using small purchase methods. Non–Federal entities adopt small purchase procedures in order to expedite the purchase of items costing less than the simplified acquisition threshold. The simplified acquisition threshold is set by the Federal Acquisition Regulation at 48 CFR Subpart 2.1 (Definitions) and in accordance with 41 U.S.C. 1908. As of the publication of this part, the simplified acquisition threshold is $150,000, but this threshold is periodically adjusted for inflation. (Also see definition of § 200.67 Micro-purchase.)

Subaward means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract.

Subrecipient means a non–Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program; but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency.

Termination means the ending of a Federal award, in whole or in part at any time prior to the planned end of period of performance.

The following certifications and provisions may be required and apply when Participating Agency expends federal funds for any purchase resulting from this procurement process. Pursuant to 2 C.F.R. § 200.326, all contracts, including small purchases, awarded by the Participating Agency and the Participating Agency's subcontractors shall contain the procurement provisions of Appendix II to Part 200, as applicable.

APPENDIX II TO 2 CFR PART 200

(A) Contracts for more than the simplified acquisition threshold currently set at $150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Pursuant to Federal Rule (A) above, when a Participating Agency expends federal funds, the Participating Agency reserves all rights and privileges under the applicable laws and regulations with respect to this procurement in the event of breach of contract by either party.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

(B) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of $10,000)

Pursuant to Federal Rule (B) above, when a Participating Agency expends federal funds, the Participating Agency reserves the right to immediately terminate any agreement in excess of $10,000 resulting from this procurement process in the event of a breach or default of the agreement by Offeror as detailed in the terms of the contract.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30

CFR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

Pursuant to Federal Rule (C) above, when a Participating Agency expends federal funds on any federally assisted construction contract, the equal opportunity clause is incorporated by reference herein.

Does offeror agree to abide by the above? YES _____ Initials of Authorized Representative of offeror

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non - Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Pursuant to Federal Rule (D) above, when a Participating Agency expends federal funds during the term of an award for all contracts and subgrants for construction or repair, offeror will be in compliance with all applicable Davis-Bacon Act provisions.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Pursuant to Federal Rule (E) above, when a Participating Agency expends federal funds, offeror certifies that offeror will be in compliance with all applicable provisions of the Contract Work Hours and Safety Standards Act during the term of an award for all contracts by Participating Agency resulting from this procurement process.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

Pursuant to Federal Rule (F) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term of an award for all contracts by Participating Agency resulting from this procurement process, the offeror agrees to comply with all applicable requirements as referenced in Federal Rule (F) above.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251- 1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA)

Pursuant to Federal Rule (G) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term of an award for all contracts by Participating Agency member resulting from this procurement process, the offeror agrees to comply with all applicable requirements as referenced in Federal Rule (G) above.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

(H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the Executive Office of the President Office of Management and Budget (OMB) guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Pursuant to Federal Rule (H) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term of an award for all contracts by Participating Agency resulting from this procurement process, the offeror certifies that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency. If at any time during the term of an award the offeror or its principals becomes debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency, the offeror will notify the Participating Agency.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term and after the awarded term of an award for all contracts by Participating Agency resulting from this procurement process, the offeror certifies that it is in compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

(1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all covered sub-awards exceeding $100,000 in Federal funds at all appropriate tiers and that all subrecipients shall certify and disclose accordingly.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

RECORD RETENTION REQUIREMENTS FOR CONTRACTS INVOLVING FEDERAL FUNDS

When federal funds are expended by Participating Agency for any contract resulting from this procurement process, offeror certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The offeror further certifies that

offeror will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT

When Participating Agency expends federal funds for any contract resulting from this procurement process, offeror certifies that it will comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18).

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

CERTIFICATION OF COMPLIANCE WITH BUY AMERICA PROVISIONS

To the extent purchases are made with Federal Highway Administration, Federal Railroad Administration, or Federal Transit Administration funds, offeror certifies that its products comply with all applicable provisions of the Buy America Act and agrees to provide such certification or applicable waiver with respect to specific products to any Participating Agency upon request. Purchases made in accordance with the Buy America Act must still follow the applicable procurement rules calling for free and open competition.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

CERTIFICATION OF ACCESS TO RECORDS – 2 C.F.R. § 200.336

Offeror agrees that the Inspector General of the Agency or any of their duly authorized representatives shall have access to any documents, papers, or other records of offeror that are pertinent to offeror's discharge of its obligations under the Contract for the purpose of making audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to offeror's personnel for the purpose of interview and discussion relating to such documents.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

CERTIFICATION OF APPLICABILITY TO SUBCONTRACTORS

Offeror agrees that all contracts it awards pursuant to the Contract shall be bound by the foregoing terms and conditions.

Does offeror agree? YES _____ Initials of Authorized Representative of offeror

Offeror agrees to comply with all federal, state, and local laws, rules, regulations and ordinances, as applicable. It is further acknowledged that offeror certifies compliance with all provisions, laws, acts, regulations, etc. as specifically noted above.

Offeror's Name: Affordable Interior Systems, Inc. (AIS)

Address, City, State, and Zip Code: 25 Tucker Drive, Leominster, MA 01453

Phone Number: 978.562.7500 Fax Number: 978.562.0811

Printed Name and Title of Authorized Representative: Bryan Poist, Chief Financial Officer (CFO)

Email Address: bpoist@ais-inc.com

Signature of Authorized Representative: Bryan Poist Date: 12-5-19

OWNERSHIP DISCLOSURE FORM
(N.J.S. 52:25-24.2)

Pursuant to the requirements of P.L. 1999, Chapter 440 effective April 17, 2000 (Local Public Contracts Law), the offeror shall complete the form attached to these specifications listing the persons owning 10 percent (10%) or more of the firm presenting the proposal.

Company Name: Affordable Interior Systems, Inc. (AIS)

Street: 25 Tucker Drive

City, State, Zip Code: Leominster, MA 01453

Complete as appropriate:

I _____, certify that I am the sole owner of _____, that there are no partners and the business is not incorporated, and the provisions of N.J.S. 52:25-24.2 do not apply.

OR:

I _____, a partner in _____, do hereby certify that the following is a list of all individual partners who own a 10% or greater interest therein. I further certify that if one (1) or more of the partners is itself a corporation or partnership, there is also set forth the names and addresses of the stockholders holding 10% or more of that corporation's stock or the individual partners owning 10% or greater interest in that partnership.

OR:

I Bryan Poist *, an authorized representative of* AIS *, a corporation, do hereby certify that the following is a list of the names and addresses of all stockholders in the corporation who own 10% or more of its stock of any class. I further certify that if one (1) or more of such stockholders is itself a corporation or partnership, that there is also set forth the names and addresses of the stockholders holding 10% or more of the corporation's stock or the individual partners owning a 10% or greater interest in that partnership.*

(Note: If there are no partners or stockholders owning 10% or more interest, indicate none.)

Name	Address	Interest
Haworth, Inc.	One Haworth Center, Holland, MI 49423	95%
No owners with 10% or more		

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

12-5-19 Bryan Poist, CFO

Date ***Authorized Signature and Title***

DOC #2

NON-COLLUSION AFFIDAVIT

Company Name: Affordable Interior Systems, Inc. (AIS)

Street: 25 Tucker Drive

City, State, Zip Code: Leominster, MA 01453

State of Massachusetts

County of Worcester

I, Bryan Poist *of*
the Affordable Interior Systems, Inc. (AIS) *Name* Leominster *City*

in the County of Worcester, *State of* Massachusetts
of full age, being duly sworn according to law on my oath depose and say that:

I am the Chief Financial Officer (CFO) *of the firm of* Affordable Interior Systems, Inc. (AIS)
Title *Company Name*

the Offeror making the Proposal for the goods, services or public work specified under the attached proposal, and that I executed the said proposal with full authority to do so; that said Offeror has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above proposal, and that all statements contained in said proposal and in this affidavit are true and correct, and made with full knowledge that relies upon the truth of the statements contained in said proposal and in the statements contained in this affidavit in awarding the contract for the said goods, services or public work.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by

Affordable Interior Systems, Inc. (AIS)
Company Name

Bryan Poist, CFO
Authorized Signature & Title

Subscribed and sworn before me
this 5th day of December, 2019

Elena C. Gordley
Notary Public of MA.
My commission expires 7-17-, 2020

SEAL

DOC #3
Requirements for National Cooperative Contract

AFFIRMATIVE ACTION AFFIDAVIT
(P.L. 1975, C.127)

Company Name: Affordable Interior Systems, Inc. (AIS)

Street: 25 Tucker Drive

City, State, Zip Code: Leominster, MA 01453

Proposal Certification:

Indicate below company's compliance with New Jersey Affirmative Action regulations. Company's proposal will be accepted even if company is not in compliance at this time. No contract and/or purchase order may be issued, however, until all Affirmative Action requirements are met.

Required Affirmative Action Evidence:

Procurement, Professional & Service Contracts (Exhibit A)
Vendors must submit with proposal:

1. A photo copy of their Federal Letter of Affirmative Action Plan Approval

   OR

2. A photo copy of their Certificate of Employee Information Report

   OR

3. A complete Affirmative Action Employee Information Report (AA302)

Public Work – Over $50,000 Total Project Cost:

A. No approved Federal or New Jersey Affirmative Action Plan. We will complete Report Form AA201-A upon receipt from the

B. Approved Federal or New Jersey Plan – certificate enclosed

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

12-5-19
Date

Ryan Pat, CFO
Authorized Signature and Title

Certification 33282

CERTIFICATE OF EMPLOYEE INFORMATION REPORT

RENEWAL

This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et. seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of 15-FEB-2019 to 15-FEB-2022

AFFORDABLE INTERIOR SYSTEMS, INC.
25 TUCKER DR.
LEOMINSTER MA 01453

ELIZABETH MAHER MUOIO
State Treasurer

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Required Pursuant to N.J.S.A. 19:44A-20.26

This form or its permitted facsimile must be submitted to the local unit no later than 10 days prior to the award of the contract.

Part I – Vendor Information

Vendor Name:	Affordable Interior Systems, Inc. (AIS)		
Address:	25 Tucker Drive		
City:	Leominster	State: MA	Zip: 01453

The undersigned being authorized to certify, hereby certifies that the submission provided herein represents compliance with the provisions of N.J.S.A. 19:44A-20.26 and as represented by the Instructions accompanying this form.

Signature	Printed Name	Title
Bryan Poist	Bryan Poist	CFO

Part II – Contribution Disclosure

Disclosure requirement: Pursuant to N.J.S.A. 19:44A-20.26 this disclosure must include all reportable political contributions (more than $300 per election cycle) over the 12 months prior to submission to the committees of the government entities listed on the form provided by the local unit.

☐ Check here if disclosure is provided in electronic form

Contributor Name	Recipient Name	Date	Dollar Amount
None	None	N/A	$ N/A

☐ Check here if the information is continued on subsequent page(s)

DOC #5

STOCKHOLDER DISCLOSURE CERTIFICATION

Name of Business:

☐ I certify that the list below contains the names and home addresses of all stockholders holding 10% or more of the issued and outstanding stock of the undersigned.

OR

☒ I certify that no one stockholder owns 10% or more of the issued and outstanding stock of the undersigned.

Check the box that represents the type of business organization:

☐ Partnership ☒ Corporation ☐ Sole Proprietorship

☐ Limited Partnership ☐ Limited Liability Corporation ☐ Limited Liability Partnership

☐ Subchapter S Corporation

Sign and notarize the form below, and, if necessary, complete the stockholder list below.

Stockholders:

Name: Home Address:	Name: Home Address:
Name: Home Address:	Name: Home Address:
Name: Home Address:	Name: Home Address:

Subscribed and sworn before me this 5th day of December, 2019

(Notary Public) Elene C. Gordey

My Commission expires: 7-17-20

Bryan Poist

(Affiant)

Bryan Poist, CFO

(Print name & title of affiant)

(Corporate Seal)

STATE OF NEW JERSEY -- DIVISION OF PURCHASE AND PROPERTY
DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

Quote Number: Region 4 ESC 19-18 **Bidder/Offeror:** Affordable Interior Systems, Inc. (AIS)

PART 1: CERTIFICATION
BIDDERS MUST COMPLETE PART 1 BY CHECKING EITHER BOX.
FAILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE.

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found on the Division's website at http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf. Bidders **must** review this list prior to completing the below certification. **Failure to complete the certification will render a bidder's proposal non-responsive.** If the Director finds a person or entity to be in violation of law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party

PLEASE CHECK THE APPROPRIATE BOX:

☑ **I certify, pursuant to Public Law 2012, c. 25, that neither the bidder listed above nor any of the bidder's parents, subsidiaries, or affiliates is listed** on the N.J. Department of the Treasury"s list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. **I will skip Part 2 and sign and complete the Certification below.**

OR

☐ **I am unable to certify as above because the bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below.** Failure to provide such will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN
You must provide a detailed, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.

EACH BOX WILL PROMPT YOU TO PROVIDE INFORMATION RELATIVE TO THE ABOVE QUESTIONS. PLEASE PROVIDE THOROUGH ANSWERS TO EACH QUESTION. IF YOU NEED TO MAKE ADDITIONAL ENTRIES, CLICK THE "ADD AN ADDITIONAL ACTIVITIES ENTRY" BUTTON.

Name _____ Relationship to Bidder/Offeror _____

Description of Activities _____

_____

Duration of Engagement _____ Anticipated Cessation Date _____

Bidder/Offeror Contact Name _____ Contact Phone Number _____

ADD AN ADDITIONAL ACTIVITIES ENTRY

Certification: I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I attest that I am authorized to execute this certification on behalf of the above-referenced person or entity. I acknowledge that the State of New Jersey is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the State to notify the State in writing of any changes to the answers of information contained herein. I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement(s) with the State of New Jersey and that the State at its option may declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print): Bryan Poist Signature: Bryan Poist

Title: CFO Date: 12-5-19

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name:	AFFORDABLE INTERIOR SYSTEMS, INC.
Trade Name:	
Address:	25 TUCKER DR LEOMISTER, MA 01453
Certificate Number:	2234713
Effective Date:	
Date of Issuance:	November 14, 2019

For Office Use Only:

20191114085941645

c) Qualification and Experience

i. Provide a brief history of the Offeror, including year it was established and corporate office location.

AIS was established in 1989. Our corporate address is 25 Tucker Drive, Leominster, MA 01453.

A Story of Innovation.

In 1989 founders, Arthur Maxwell and Bruce Platzman started AIS by procuring and installing used furniture. AIS grew quickly in the early 90s to be a scalable company that embarked into manufacturing. We believe that good ideas will get you everywhere. In less than 30 years, we've evolved from a start-up based on the simple intent to adopt lean manufacturing to become one of the most highly regarded names in the industry. AIS has earned acclaim for product design, ground-breaking manufacturing and unparalleled sustainability across the industry and within our local and regional communities. And, our deep roots in New England are a great source of pride for us.

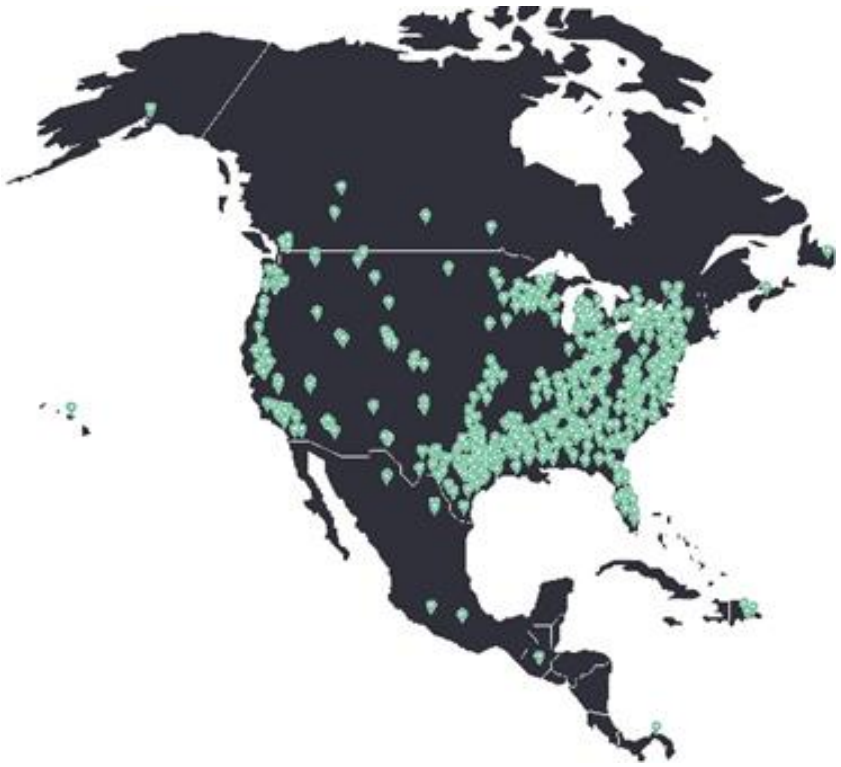
Tremendous growth and recognition.

AIS set out to disrupt the industry through true innovation and sustainability—a vision that has consistently paid off for our company and our customers. The talented, enthusiastic AIS team has virtually reinvented product development and manufacturing processes, helping us grow far faster than industry benchmarks and earning OFDA Manufacturer of the Year nine times since 2008. Today, with sales teams across North America and 750 employees at our new 600,000-square-foot factory and headquarters, we've risen to annual sales of more than $200 million. One thing, however, will never change—our commitment to superior products with industry-beating lead times and attractive prices.



More than providers. True partners.

Through a robust network of expert dealers, our employees drive to continually break new ground with inventive products and processes, and unwavering dedication to our customers and community. AIS has established itself as a partner of choice—whether furnishing a start-up space or fulfilling a new vision for a Fortune 500® firm.



Strong Dealer Network Across North America.

Sustainable from the start.

Since the beginning, AIS has led the way in sustainability—making social responsibility and our environment a top priority. Our visionary team recognized early on that efficient manufacturing is naturally more sustainable, requiring fewer resources and less energy. We've invested in alternative energy and moved toward carbon neutrality. And as a privately held firm, AIS has greater freedom to explore innovative processes and equipment, as well as ways to eliminate wasted time, steps, inventory and resources, as we strive to inspire a greener industry overall.

Today, all AIS products are SCS Indoor Advantage™ Gold certified for air quality, and AIS systems contain at least 40% recycled materials. What's more, we've achieved BIFMA e3 level® certification on our products, and more than 50% of the power used in our state-of-the-art facility is returned to the grid through our rooftop solar panels.

From the talent we hire to the way we design, manufacture and distribute our products, AIS has always thought differently.

ii. Describe Offeror's reputation in the marketplace.

AIS is known for offering market-relevant, feature-rich product lines that entice designers and support the diverse needs of end-users while offering exceptional value. AIS is an innovator that leads the industry in sustainable, lean manufacturing, lead-time performance and manufacturing flexibility.
AIS is a self-taught and self-grown company. We know our capabilities and leverage the products and services we are confident we can deliver. We can be easy to do business with by answering the phone and really listening to our customers. We can do things quicker, because we have the passion. If we make a commitment, we deliver on that commitment. All these attributes are the fiber of our culture and existence.

AIS is known for being generously socially responsible. AIS is dedicated to supporting the local community and part of our culture is philanthropy. Whether it's volunteering time, providing financial assistance or both, employees are committed to making a difference. AIS was named one of the top 105 most charitable companies in Massachusetts for 2019 and was honored at the Boston Business Journal Corporate Citizenship Awards. Another significant philanthropic gesture was donating nearly $700,000 worth of installed office furniture for the new Make-A-Wish Massachusetts and Rhode Island headquarters in Boston. AIS also works with United Way of North Central Massachusetts, the American Red Cross and the cities of Leominster and Fitchburg.

AIS works with a diverse customer base stretching throughout North America. Customers include federal government, healthcare, high tech/IT companies, department stores/fashion, colleges and universities, general contractors, automobile manufacturers and airline companies just to name a few categories. Major U.S. customers and installations have included J.D. Power and Associates, IBM, Google, Macy's, Children's Hospital of Wisconsin, University of Chicago, NYSE, Lockheed Martin, Nissan, GM, JetBlue Airways and many, many others as shown below.



iii. Describe Offeror's reputation of products and services in the marketplace.

AIS products are mid-market with a full line of office furniture that is smartly in tune with customers' needs in the constantly changing landscape of the workplace. AIS is known for providing panel systems, benching and desking systems, tables, casegoods, storage and seating. We may not be first to the market with a product, but we see product trends evolve and engineer our new products better based on market feedback.



AIS has been recognized by the Office Furniture Dealers Alliance (OFDA) for various product awards for the past 11 years. In 2019, AIS received four (4) OFDA Dealers' Choice Awards in categories of Workstations, Casegoods, Seating and Tables. This year's OFDA Dealers' Choice Survey ran from early March to the end of April. According to OFDA, the survey is a carefully structured, anonymous dealer poll that measures six functional areas of manufacturer performance that are of greatest importance to a diverse cross-section of dealers throughout North America. The survey provides product category-level feedback from dealers of all sizes on the full range of support they receive from their primary non-aligned suppliers. Dealers are asked to rate these top-volume, non-aligned suppliers in each of six product categories recognized by the Business and Institutional Furniture Manufacturers Association (BIFMA) based on their 2018 interaction. The six product categories are: Casegoods, Storage, Filing, Tables, Seating and Workstations/Systems. The purpose of the survey is to promote an open discussion of business issues between dealers and manufacturers and improve the office furniture industry overall.

In July 2019, AIS conducted an Effective Partnering Survey Report, a customer satisfaction survey of selected Dealer staff.

The AIS Effective Partnering Survey evaluated the business process (how the Dealer interacts with AIS) as well as how the Dealership utilizes and values existing AIS resources. The survey measured both importance and expectations in six categories: Sales Support, Product Focus, Marketing, Pre-Order Process, Quote-To-Invoice Process and Improvements. Subcategories provided additional detail. There was a total of 17 subcategories, 76 specific areas, and 25 open-response feedback opportunities.

Strong scores in several key areas indicate Dealer acknowledgment that AIS does many things well. This survey confirms that AIS has several strengths to draw upon, and that Dealers value the investment AIS has made in people, processes and product. Overall, AIS meets or exceeds Dealer expectations in all 17 of the subcategories surveyed.

The survey data suggests that AIS is a good partner. The respondents rated 76 areas in the survey, rating all but two areas as important or higher and 64 areas as meeting or exceeding expectations. AIS uses this dealer survey to identify areas of continuous improvement.

AIS uses IMOS, SolidWorks and woodCAD|CAM software. We were able to set up a very efficient system using the latest technology capable of doing production manufacturing that is also very flexible for custom. We have the ability to stretch products, add shelves and do all sorts of other things our customers request. By embracing technology and not having the layers other manufacturers have for a company structure. All our products are designed in-house by a small on-site team and this allows us to get to the market a lot faster than other manufacturers.

AIS universalizes products maybe a lot more than the other manufacturers do. We can use the same pedestal in all of our different laminate case goods lines as opposed to having a more designed conceptual product that requires multiple SKUs and multiple disciplines for manufacturing. The variety and the speed with which we can design and manufacture product using this very consistent product is what our customers are requiring right now.

Over the past 10 years, we have focused on expanding our product lines to increase our breadth of line. The marketplace has seen us release new seating lines and complementary products for existing lines.

Our employees make a difference. In a sense our employees are all entrepreneurs and self-motivated. We are up for each challenge presented to us. Because of the very few layers of management at AIS, our people can do their jobs and take pride in the true value they add to AIS.

The Project Management team is an internal advocate for our dealers from purchase order planning to punch lists. The team checks, tests and double checks all aspects of a project. They are the primary contact for our dealers from the inception to the completion of the project. With a combined over 100 years of experience in the office furniture industry, each member brings their unique experience to the team. One reason for the team's success is the collaborative approach to process and risk mitigation.

AIS offers field services expertise for select installations. Field services conducts trainings for dealer installation teams on all AIS products. This department is on call 24/7. You can often find them "Facetiming" with installers to provide installation advice. For high profile projects, they can be on site to ensure the installation is successfully completed to end user's specification.

Our customer service representatives (CSR) go above and beyond daily to make sure our customers are satisfied. A few examples are responding to phone calls and emails in less than 24 hours, working closely with production and monitoring progress to ensure a ship date is met and pulling parts needed off the factory floor to FedEx out to customers to ensure installations can be completed on time. This department works outside of normal business hours to ensure they are responding to inquiries and resolving issues within one day. This department provides our customers with a complete support system.

iv. Describe the experience and qualification of key employees.



Nick Haritos, Executive Vice President of Sales & Distribution

Nick joined AIS in January 2018. He leads all sales and distribution throughout North America. Haritos' career spanning three decades in management and business development includes more than 25 years in contract furniture, including 16 years with Haworth, most recently as vice president of sales and distribution covering a five-region territory stretching from New England to the Caribbean. Before Haworth, he served as senior vice president of sales for Office Environments of New England. The native New Englander earned a bachelor's degree from Plymouth State University in New Hampshire and a master's degree from Saint Michael's College in Vermont. He earned a certificate in mediation from Woodbury College in Vermont and completed additional post-graduate work in alternative dispute resolution at Nova Southeastern University in Florida.



Tracy Reed, Vice President of Marketing

Tracy joined AIS in January 2017 as Marketing Vice President and brings over 20 years of vast industry experience to the role. Her strong understanding of dealer sales, product line management, marketing communications, and new product introductions ideally suit her as she leads AIS brand forward. Prior to joining the office furniture industry, she held various agency roles with Biggs-Gilmore Communications and led international product launches for Amway Corporation. Tracy hold a BBA and a BAS from Western Michigan University, and an MBA from Grand Valley State University.



Amy Transue, Director of Marketing and Strategic Resources

Amy began her career with AIS in 2005. As AIS Director of Marketing & Strategic Resources, she leads marketing, sustainability, bid opportunities, competitive strategies and forecasting. With her broad experience and holistic contract furniture industry experience, she provides leadership to the sales team with special projects and training. Through her acute market focus and creativity, she leads her team to deliver exemplary sales tools positioning AIS Best-In-Class. Transue holds a Bachelor of Science in Business Administration with a concentration in Management from Fitchburg State College.



Helen Woods, Bid & Contract Specialist

Helen joined the AIS team in 2016, however she has more than ten years of experience in the office furniture industry, six of which were focused on GSA bid and contract response. With experience both from the manufacturer and the dealer perspective in office furniture design, management and sales, Helen is adept in coordinating thorough, detailed responses to both commercial and government opportunities. With a background in design, Helen has an intimate understanding of furniture specification, configuration, space planning, and installation. Helen also contributes additional skills including communication with end-users, database maintenance and finance management to her role at AIS. She manages over 30 contracts including all GSA, Navy BPA, state and cooperative contracts. Helen has a Bachelor of Fine Arts degree in Interior Design as well as a Bachelor of Science degree in psychology.

v. Describe Offeror's experience working with the government sector.

AIS' GSA contract was awarded in 2000 and our Spiral III Navy BPA contract was awarded in 2017. Federal sales account for 10-15% of our overall sales. Our GSA sales for 2019 will exceed $11MM.

AIS has been elected to government offices across the country. Our success includes, but by no means limited to the following federal clients:

- Pentagon
- Consumer Products Safety Commission
- US Department of Defense
- US Department of Energy
- US Department of Navy
- Drug Enforcement Agency (DEA)
- National Guard
- NASA
- and more.

For over 20 years, the federal government has chosen AIS to meet their office furniture needs – and we've been honored to answer the call. For example, in 2001, right after 9/11, AIS was the chosen office furniture provider for the Pentagon. We delivered faster than any manufacturer could delivering and installing over 2000 workstations in 30 days. Governments often have to react and respond quickly. And we do the same. Our products are high quality, lifetime guaranteed and manufactured 15-20 days after we receive the order. We meet tight deadlines and tough expectations.

Example of successful projects include the below.

Sheppard Air Force Base Project
142 Matrix and Calibrate workstations

The new “80th Operations Group” sought office furniture with high environmental standards. AIS was selected for this project not only due to the company’s emphasis on environmentally -sound materials and lean manufacturing, but also our ability to provide a quality product at reasonable pricing.

U.S. Department Of Wildlife Project
300 Matrix workstations

The Southeast Region of the U.S. Fish and Wildlife Service covers 430,000 square miles. The Division of Realty is in the regional office headquarters located in Atlanta, GA, and is responsible for land acquisition and all aspects of realty management on 128 national wildlife refuges and 19 fish hatcheries throughout the Southeast region. AIS’s Matrix was selected due to its ability to meet their strict technical specifications, product quality, short leadtimes and affordability.

Ft. Lewis Readiness Center Project
200 Matrix workstations

The “Joint Base Lewis-McChord Readiness Center” (JBLM) validates authority for personnel, administrative and medical readiness of JBLM soldiers and civilians, and designates ARNG and USAR soldiers in preparing for mobilization or deployment. AIS was selected as part of a team to complete this project for its professional yet durable product.

Centers for Disease Control And Prevention Project
600 Matrix workstations

The CDC focuses on infectious diseases worldwide and acts as the single mouthpiece for the U.S. on diseases. The offices located in Hyattsville, MD are a regional headquarters for the agency based in Atlanta, GA. Housing 591 employees, the regional office will span four floors of a 10-story office building. The CDC selected Matrix because of the product’s flexibility, power and data management capabilities and the overall aesthetics.

vi. Describe past litigation, bankruptcy, reorganization, state investigations of entity or current officers and directors.

AIS has not and does not have any past litigation, bankruptcy, reorganization, state investigations of any current officers and directors.

vii. Provide a minimum of 10 customer references relating to the products and services within this RFP. Include entity name, contact name and title, contact phone and email, city, state, years serviced, description of services and annual volume.

No.	Entity	Contact Name	Contact Title	Contact Phone	Contact Email	Location of Entity	Years Served	Description of Products/Services	Annual Volume
1	Digital Credit Union	Gayle Lombardi	Director of Real Estate	800.328.8797	glombardi@dcu.org	New England	5	Devens seating Natick seating, Grafton side chairs, Stow chairs, Day-	$ 350,000.00
2	Ahold	Leslie Weatherbie	MGR NFR CapEx Sourcing	207.885.2528	Leslie.Weatherbie@RetailBusinessServices.com	Quincy MA, Eastern Seaboard	10	Day-to-Day Tables, Stow seating, Bolton seating, Devens seating and Natick	$ 600,000.00
3	Fidelity National Financial	Vanessa Proudfoot	Sourcing Manager, AVP	904.854.8904	Vanessa.Proudfoot@fnf.com	Jacksonville, FL	4	to-Day Tables, Stow chairs, Bolton seating, Devens seating and Natick	$ 1,000,000.00
4	Delta Dental	Ryan Carlson	Account Executive	952.925.7543	rcarlson@gopco.com	Minneappolis, Bemidji	1	Systems, Seating, Tables &	$ 1,000,000.00
5	Altamed Health Services Corporation	Gustavo Avelar	Purchasing Manager	323.722.8300 x261	gavelar@teamtcs.com	Various – HQ at 2040 Camfield Ave. Los Angeles, CA 90040	10	Primarily Matrix. We provide workstations for clinics and administrative spaces. Clinics are typically 50 workstations and the administrative projects can be approximately 350 workstations. Currently completing a $700,000 net Matrix installation.	$ 2,500,000.00
6	USI Insurance Services	Patti Vreeland	Vice President, Corporate Real Estate & Procurement USI Insurance Services	914.749.8548	patti.vreeland@usi.com	Valhalla, NY	8	USI is standardized on Divi with Calibrate, LB Lounge and Day-to-Day Tables.	$ 3,000,000.00
7	PVH Corp.	Bryan Duggan	VP Facilities	908.698.6525	BryanDuggan@pvh.com	New York, New York	6	stations with Calibrate Storage and 200 Oxygen stations with Calibrate	$ 1,500,000.00
8	City Bank	Brian Kimberly	Facilities Manager	806.792.7101	bkimberly@city.bank	Lubbock, TX	4	Divi workstations	$ 75,000.00
9	Virginia Department of Environmental Quality	Jay Gutshall	General Services Manager	804.698.4402	jay.gutshall@deq.virginia.gov	1111 East Main Street, Richmond, VA 23219	2	Divi workstation, Paxton side chairs and conference/training tables	$ 1,050,000.00
10	Pentagon Federal Credit Union	Raghu Babu	Director of Construction	571.328.2625	Raghu.Babu@PenFed.org	Multiple national locations	2	Divi workstations, Calibrate, Seaitng and Tables	$ 1,000,000.00

viii. Provide any additional information relevant to this section.

No.	Entity	Contact Name	Contact Title	Contact Phone	Contact Email	Location of Entity	Years Served	Description of Products/Services	Annual Volume
1	Digital Credit Union	Gayle Lombardi	Director of Real Estate	800.328.8797	glombardi@dcu.org	New England	5	seating Natick seating, Grafton side chairs, Stow chairs, Day-to-Day Tables	$ 350,000.00
2	Ahold	Leslie Weatherbie	MGR NFR CapEx Sourcing	207.885.2528	Leslie.Weatherbie@RetailBusinessServices.com	Quincy MA, Eastern Seaboard	10	Day-to-Day Tables, Stow seating, Bolton seating, Devens seating and Natick	$ 600,000.00
3	Fidelity National Financial	Vanessa Proudfoot	Sourcing Manager, AVP	904.854.8904	Vanessa.Proudfoot@fnf.com	Jacksonville, FL	4	to-Day Tables, Stow chairs, Bolton seating, Devens seating and Natick seating	$ 1,000,000.00
4	Delta Dental	Ryan Carlson	Account Executive	952.925.7543	rcarlson@gopco.com	Minneappolis, Bemidji	1	Systems, Seating, Tables & C	$ 1,000,000.00
5	Altamed Health Services Corporation	Gustavo Avelar	Purchasing Manager	323.722.8300 x261	gavelar@teamtcs.com	Various – HQ at 2040 Camfield Ave. Los Angeles, CA 90040	10	Primarily Matrix. We provide workstations for clinics and administrative spaces. Clinics are typically 50 workstations and the administrative projects can be approximately 350 workstations. Currently completing a $700,000 net Matrix installation.	$ 2,500,000.00
6	USI Insurance Services	Patti Vreeland	Vice President, Corporate Real Estate & Procurement USI Insurance Services	914.749.8548	patti.vreeland@usi.com	Valhalla, NY	8	USI is standardized on Divi with Calibrate, LB Lounge and Day-to-Day Tables.	$ 3,000,000.00
7	PVH Corp.	Bryan Duggan	VP Facilities	908.698.6525	BryanDuggan@pvh.com	New York, New York	6	with Calibrate Storage and 200 Oxygen stations with Calibrate Storage installed.	$ 1,500,000.00
8	City Bank	Brian Kimberly	Facilities Manager	806.792.7101	bkimberly@city.bank	Lubbock, TX	4	Divi workstations	$ 75,000.00
9	Virginia Department of Environmental Quality	Jay Gutshall	General Services Manager	804.698.4402	jay.gutshall@deq.virginia.gov	1111 East Main Street, Richmond, VA 23219	2	Divi workstation, Paxton side chairs and conference/training tables	$ 1,050,000.00
10	Pentagon Federal Credit Union	Raghu Babu	Director of Construction	571.328.2625	Raghu.Babu@PenFed.org	Multiple national locations	2	Divi workstations, Calibrate, Seaitng and Tables	$ 1,000,000.00

AIS

d) Value Add

i. Provide any additional information related to products and services Offeror proposes to enhance and add value to the Contract.

AIS value add capabilities include:

- AIS is an award-winning lean manufacturer. Our manufacturing excellence sets us apart from the competition. By implementing innovative lean production methods, we are able to build superior product at a lower cost than the competition.
- Vast dealer network of over 1000 dealers.
- AIS uses IMOS, SolidWorks and woodCAD|CAM software. We were able to set up a very efficient system using the latest technology capable of doing production manufacturing that is also very flexible for custom. We have the ability to stretch products, add shelves and do all sorts of other things our customers request. By embracing technology and not having the layers other manufacturers have for a company structure. All our products are designed in-house by a small on-site team and this allows us to get to the market a lot faster than other manufacturers.
- AIS universalizes products maybe a lot more than the other manufacturers do. We can use the same pedestal in all of our different laminate case goods lines as opposed to having a more designed conceptual product that requires multiple SKUs and multiple disciplines for manufacturing. The variety and the speed with which we can design and manufacture product using this very consistent product is what our customers are requiring right now.
- AIS has a flat organizational structure, what we mean by this is that we do not need to go through each level of management to get things done. AIS is a very “get it done” type of company. Our customer service team is empowered by management to do what it takes to get things done. We also understand the urgency when a customer calls with an issue or a question. We feel that we can manage the customer’s account easily within the first three tiers (Customer Service Representative, Manager of Customer Service, OEM Contract Administrator). But also know our entire team is behind the Region 4 ESC contract and ready to support the needs of all Region 4 ESC customers.
- Our employees make a difference. In a sense our employees are all entrepreneurs and self-motivated. We are up for each challenge presented to us. Because of the very few layers of management at AIS, our people can do their jobs and take pride in the true value they add to AIS. Many of AIS employees work outside of normal working hours of Monday through Friday, 8:00am – 5:00pm EDT. All employees have customer satisfaction as a driving force.
- Our specification department made up of 15 designers across the United

States that work from an online queue offering two main services; design checks and specification requests. This department also facilitates rendering requests, product specification support and mock-up/showroom reviews to ensure our products are showcased in the best way.

- The Project Management team is an internal advocate for our dealers from purchase order planning to punch lists. The team checks, tests and double checks all aspects of a project. They are the primary contact for our dealers from the inception to the completion of the project. With a combined over 100 years of experience in the office furniture industry, each member brings their unique experience to the team. One reason for the team's success is the collaborative approach to process and risk mitigation.

- AIS offers field services expertise for select installations. Field services conducts trainings for dealer installation teams on all AIS products. This department is on call 24/7. You can often find them "Facetiming" with installers to provide installation advice. For high profile projects, they can be on site to ensure the installation is successfully completed to end user's specification.

- AIS offers the best lead times in the industry and 75% of our products ship in two (2) weeks or less. If successful as a vendor partner, we will provide key internal contacts form our customer service and project management teams that can expedite emergency orders. If all the components of the emergency order are stock items, we can typically respond in less than two (2) weeks or even shorter depending on the products specified.

- Freight costs are included for seating product category.

- Commitment to social responsibility with our many sustainable practices. AIS has partnered with ANEW to provide a take-back solution for surplus office furniture and materials. This partnership provides AIS clients with a means to repurpose their furniture, fixtures and architectural materials, diverting the items from landfill. All captured materials are donated to public agencies and charities within a 50 mile radius, benefiting the local communities to which the furniture resided.

3. Competitive Range: It may be necessary to establish a competitive range. Factors from the predetermined criteria will be used to make this determination. Responses not in the competitive range will not receive further award consideration. Region 4 ESC may determine establishing a competitive range is not necessary.

4. Past Performance: An Offeror's past performance and actions are relevant in determining whether or not the Offeror is likely to provide quality goods and services; the administrative aspects of performance; the Offeror's history of reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the Offeror's businesslike concern for the interests of the customer may be taken into consideration when evaluating proposals, although not specifically mentioned in the RFP.

5. Additional Investigations: Region 4 ESC reserves the right to make such additional investigations as it deems necessary to establish the capability of any Offeror.

7145 West Tidwell Road ~ Houston, Texas 77092
(713)-462-7708
www.esc4.net

NOTICE TO OFFEROR

ADDENDUM NO. 1

Solicitation Number 19-18

Request for Proposal ("RFP")
by Region 4 Education Service Center ("ESC")
for Furniture, Installation, and Related Services

This Addendum No. 1 amends the Request for Proposals (RFP) for Furniture, Installation, and Related Services 19-18 ("Addendum"). To the extent of any discrepancy between the original RFP and this Addendum, this Addendum shall prevail.

Region 4 Education Service Center ("Region 4 ESC") requests proposals from qualified suppliers with the intent to enter into a Contract for Furniture, Installation, and Related Services. Addendum No. 1 is hereby issued as follows:

CLARIFICATIONS:

1. The changes being made to this RFP are being made to add Appendix C Documents #5-7 in order to fulfill FEMA requirements. While it is not expected that the services outlined in this RFP would be utilized in a disaster recovery or emergency situation, Region 4 ESC is including language should it be needed.

CHANGES TO THE RFP:

1. Remove Appendix C, Additional Required Documents, and replace with the version attached to this Addendum No. 2. This is the Appendix C that should be used for this solicitation and submitted as part of the Offeror's proposal.

Appendix C
ADDITIONAL REQUIRED DOCUMENTS

DOC #1 Acknowledgment and Acceptance of Region 4 ESC's Open Records Policy

DOC #2 Antitrust Certification Statements (Tex. Government Code § 2155.005)

DOC #3 Implementation of House Bill 1295 Certificate of Interested Parties (Form 1295)

DOC #4 Texas Government Code 2270 Verification Form

DOC #5 Special Conditions

DOC #6 Questionnaire

DOC #7 For applicable construction/reconstruction/renovation and related services, a bid guarantee is required not less than five percent (5%) of the total bid. Surety shall provide a copy of the Power of Attorney authorizing the Executing Agent the authority to execute the bid bond documents and bind the Surety to the bid bond conditions. The bid bond shall have a corporate Surety that is licensed to conduct business in Texas and authorized to underwrite bonds in the amount of the bid bond.

Appendix C, Doc #1

ACKNOWLEDGMENT AND ACCEPTANCE
OF REGION 4 ESC's OPEN RECORDS POLICY

OPEN RECORDS POLICY

All proposals, information and documents submitted are subject to the Public Information Act requirements governed by the State of Texas once a Contract(s) is executed. If an Offeror believes its response, or parts of its response, may be exempted from disclosure, the Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt and include detailed reasons to substantiate the exemption. Price is not confidential and will not be withheld. Any unmarked information will be considered public information and released, if requested under the Public Information Act.

The determination of whether information is confidential and not subject to disclosure is the duty of the Office of Attorney General (OAG). Region 4 ESC must provide the OAG sufficient information to render an opinion and therefore, vague and general claims to confidentiality by the Offeror are not acceptable. Region 4 ESC must comply with the opinions of the OAG. Region 4 ESC assumes no responsibility for asserting legal arguments on behalf of any Offeror. Offeror is advised to consult with their legal counsel concerning disclosure issues resulting from this procurement process and to take precautions to safeguard trade secrets and other proprietary information.

Signature below certifies complete acceptance of Region 4 ESC's Open Records Policy, except as noted below (additional pages may be attached, if necessary).

Check one of the following responses to the Acknowledgment and Acceptance of Region 4 ESC's Open Records Policy below:

☐ We acknowledge Region 4 ESC's Open Records Policy and declare that no information submitted with this proposal, or any part of our proposal, is exempt from disclosure under the Public Information Act.

☒ We declare the following information to be a trade secret or proprietary and exempt from disclosure under the Public Information Act.

(Note: Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, Offeror must include detailed reasons to substantiate the exemption(s). Price is not confident and will not be withheld. All information believed to be a trade secret or proprietary must be listed. It is further understood that failure to identify such information, in strict accordance with the instructions, will result in that information being considered public information and released, if requested under the Public Information Act.)

12-5-19
Date

CFO
Authorized Signature & Title

Tab	Page	Exemption Response Request	Detailed Reason
2	Pages 1 - 6	All Sections of Products/Services/Pricing	Our pricing and services are a proprietary strategy of AIS. These will be shared with internally and with our dealer community. They can be sent to end users upon request and appropriate information will be incorporated into our dedicated OMNIA Partners website. The answers and strategies discussed are unique to AIS and we request they not be published publically.
3	Pages 1-16	All Sections of Performance Capability	Our pricing and services are a proprietary strategy of AIS. These will be shared with internally and with our dealer community. They can be sent to end users upon request and appropriate information will be incorporated into our dedicated OMNIA Partners website. The answers and strategies discussed are unique to AIS and we request they not be published publically.
3	Pages 1 - 48	All Sections of Company; Distribution, Logistics; Marketing and Sales	Our pricing and services are a proprietary strategy of AIS. These will be shared with internally and with our dealer community. They can be sent to end users upon request and appropriate information will be incorporated into our dedicated OMNIA Partners website. The answers and strategies discussed are unique to AIS and we request they not be published publically.
4	Pages 1 - 9	All Sections of Qualification and Experience	Our pricing and services are a proprietary strategy of AIS. These will be shared with internally and with our dealer community. They can be sent to end users upon request and appropriate information will be incorporated into our dedicated OMNIA Partners website. The answers and strategies discussed are unique to AIS and we request they not be published publically.
4	Page 1	All References	Our pricing and services are a proprietary strategy of AIS. These will be shared with internally and with our dealer community. They can be sent to end users upon request and appropriate information will be incorporated into our dedicated OMNIA Partners website. The answers and strategies discussed are unique to AIS and we request they not be published publically.
5	Pages 1 - 2	All Sections of Value Add	Our pricing and services are a proprietary strategy of AIS. These will be shared with internally and with our dealer community. They can be sent to end users upon request and appropriate information will be incorporated into our dedicated OMNIA Partners website. The answers and strategies discussed are unique to AIS and we request they not be published publically.
	Pages 1 - 17	Entire List of Authorized Dealers	Our pricing and services are a proprietary strategy of AIS. These will be shared with internally and with our dealer community. They can be sent to end users upon request and appropriate information will be incorporated into our dedicated OMNIA Partners website. The answers and strategies discussed are unique to AIS and we request they not be published publically.
6	Appendix C, DOC # 3	Form 1295	Due to being a privately held company, we request to not publish this form publically.
6	Ownership Disclosure Form	Entire Form	Due to being a privately held company, we request to not publish this form publically.

Appendix C, Doc #2

ANTITRUST CERTIFICATION STATEMENTS
(Tex. Government Code § 2155.005)
Attorney General Form

I affirm under penalty of perjury of the laws of the State of Texas that:

1. I am duly authorized to execute this Contract on my own behalf or on behalf of the company, corporation, firm, partnership or individual (Company) listed below;

2. In connection with this proposal, neither I nor any representative of the Company has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15;

3. In connection with this proposal, neither I nor any representative of the Company has violated any federal antitrust law; and

4. Neither I nor any representative of the Company has directly or indirectly communicated any of the contents of this proposal to a competitor of the Company or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Company.

Company Affordable Interior Systems, Inc. (AIS)

Address 25 Tucker Drive
Leominster, MA 01453

Phone 978.562.7500

Fax 978.562.0811

Contact

Official Authorizing Proposal

Signature

Bryan Poist
Printed Name

Chief Financial Officer
Position with Company

Signature

Bryan Poist
Printed Name

Chief Financial Officer
Position with Company

Appendix C, DOC # 3

Implementation of House Bill 1295

Certificate of Interested Parties (Form 1295):

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least $1 million. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

The Texas Ethics Commission was required to adopt rules necessary to implement that law, prescribe the disclosure of interested parties form, and post a copy of the form on the commission's website. The commission adopted the Certificate of Interested Parties form (Form 1295) on October 5, 2015. The commission also adopted new rules (Chapter 46) on November 30, 2015, to implement the law. The commission does not have any additional authority to enforce or interpret House Bill 1295.

Filing Process:

Staring on January 1, 2016, the commission made available on its website a new filing application that must be used to file Form 1295. A business entity must use the application to enter the required information on Form 1295 and print a copy of the completed form, which will include a certification of filing that will contain a unique certification number. An authorized agent of the business entity must sign the printed copy of the form. The completed Form 1295 with the certification of filing must be filed with the governmental body or state agency with which the business entity is entering into the contract.

The governmental entity or state agency must notify the commission, using the commission's filing application, of the receipt of the filed Form 1295 with the certification of filing not later than the 30th day after the date the contract binds all parties to the contract. This process is known as acknowledging the certificate. The commission will post the acknowledged Form 1295 to its website within seven business days after receiving notice from the governmental entity or state agency. The posted acknowledged form does not contain the declaration of signature information provided by the business.

A certificate will stay in the pending state until it is acknowledged by the governmental agency. Only acknowledged certificates are posted to the commission's website.

Electronic Filing Application:
https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

Frequently Asked Questions:
https://www.ethics.state.tx.us/resources/FAQs/FAQ_Form1295.php

Changes to Form 1295: https://www.ethics.state.tx.us/data/filinginfo/1295Changes.pdf

CERTIFICATE OF INTERESTED PARTIES

FORM **1295**

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2019-566254

Date Filed:
12/03/2019

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Affordable Interior Systems Inc
Leominster, MA United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Region 4 ESC

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

TXMAS-7-7110170
Contract Office Furniture

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Haworth Inc	Holland, MI United States	X	

5 Check only if there is NO Interested Party. ☐

6 UNSWORN DECLARATION

My name is _____, and my date of birth is _____.

My address is _____, _____, _____, _____, _____.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in _____ County, State of _____, on the _____ day of _____, 20_____.
(month) (year)

_____
Signature of authorized agent of contracting business entity
(Declarant)

Appendix C, DOC # 4

Texas Government Code 2270 Verification Form

House Bill 89 (85R Legislative Session), which adds Chapter 2270 to the Texas Government Code, provides that a governmental entity may not enter into a contract with a company without verification that the contracting vendor does not and will not boycott Israel during the term of the contract.

Furthermore, Senate Bill 252 (85R Legislative Session), which amends Chapter 2252 of the Texas Government Code to add Subchapter F, prohibits contracting with a company engaged in business with Iran, Sudan or a foreign terrorist organization identified on a list prepared by the Texas Comptroller.

I, Bryan Poist, as an authorized representative of

Affordable Interior Systems, Inc. (AIS), a contractor engaged by

Insert Name of Company

Region 4 Education Service Center, 7145 West Tidwell Road, Houston, TX 77092, verify by this writing that the above-named company affirms that it (1) does not boycott Israel; and (2) will not boycott Israel during the term of this contract, or any contract with the above-named Texas governmental entity in the future.

Also, our company is not listed on and we do not do business with companies that are on the Texas Comptroller of Public Accounts list of Designated Foreign Terrorists Organizations found at https://comptroller.texas.gov/purchasing/docs/foreign-terrorist.pdf.

I further affirm that if our company's position on this issue is reversed and this affirmation is no longer valid, that the above-named Texas governmental entity will be notified in writing within one (1) business day and we understand that our company's failure to affirm and comply with the requirements of Texas Government Code 2270 et seq. shall be grounds for immediate contract termination without penalty to the above-named Texas governmental entity.

I swear and affirm that the above is true and correct.

Bryan Poist

Signature of Named Authorized Company Representative

12-5-19

Date

SPECIAL CONDITIONS

Awarded Offerors may need to respond to events and losses where products and services are needed for the immediate and initial response to emergency situations such as, but not limited to, water damage, fire damage, vandalism cleanup, biohazard cleanup, sewage decontamination, deodorization, and/or wind damage during a disaster or emergency situation. By submitting a proposal, the Offeror is accepted these Special Conditions required by the Federal Emergency Management Agency (FEMA).

Conflicts of Interest

No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a FEMA award if he or she has a real or apparent conflict of interest. Such a conflict would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of these parties, has a financial or other interest in or a tangible personal benefit from a firm considered for award. 2 C.F.R. § 200.318(c)(1); See also Standard Form 424D, ¶ 7; Standard Form 424B, ¶ 3.

i. FEMA considers a "financial interest" to be the potential for gain or loss to the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of these parties as a result of the particular procurement. The prohibited financial interest may arise from ownership of certain financial instruments or investments such as stock, bonds, or real estate, or from a salary, indebtedness, job offer, or similar interest that might be affected by the particular procurement.

ii. FEMA considers an "apparent" conflict of interest to exist where an actual conflict does not exist, but where a reasonable person with knowledge of the relevant facts would question the impartiality of the employee, officer, or agent participating in the procurement. c. Gifts. The officers, employees, and agents of Region 4 ESC nor the Participating Public Agency ("NFE") must neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, NFE's may set standards for situations in which the financial interest is de minimus, not substantial, or the gift is an unsolicited item of nominal value. 2 C.F.R. § 200.318(c)(1). d. Violations. The NFE's written standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the NFE. 2 C.F.R. § 200.318(c)(1). For example, the penalty for a NFE's employee may be dismissal, and the penalty for a contractor might be the termination of the contract.

Contractor Integrity

A contractor must have a satisfactory record of integrity and business ethics. Contractors that are debarred or suspended as described in Chapter III, ¶ 6.d must be rejected and cannot receive contract awards at any level.

Public Policy

A contractor must comply with the public policies of the Federal Government and state, local government, or tribal government. This includes, among other things, past and current compliance with the:
a. Equal opportunity and nondiscrimination laws
b. Five affirmative steps described at 2 C.F.R. § 200.321(b) for all subcontracting under contracts supported by FEMA financial assistance; and FEMA Procurement Guidance June 21, 2016 Page IV- 7
c. Applicable prevailing wage laws, regulations, and executive orders

Affirmative Steps

For any subcontracting opportunities, Contractor must take the following Affirmative steps:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
5. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce;

Bid Guarantee

For proposals that are to include construction/reconstruction/renovation and related services, bids must be accompanied by Certified or Cashier's Check or an approved Bid Bond in the amount of not less than five percent (5%) of the total bid. Surety shall provide a copy of the Power of Attorney authorizing the Executing Agent the authority to execute the bid bond documents and bind the Surety to the bid bond conditions. The bid bond shall have a corporate Surety that is licensed to conduct business in the state of the lead agency and authorized to underwrite bonds in the amount of the bid bond.

Prevailing Wage Requirements

When applicable, the awarded Contractor(s) and any and all subcontractor(s) agree to comply with all laws regarding prevailing wage rates including the Davis-Bacon Act, applicable to this solicitation and/or Participating Public Agencies. The Participating Public Agency shall notify the Contractor of the applicable pricing/prevailing wage rates and must apply any local wage rates requested. The Contractor and any subcontractor(s) shall comply with the prevailing wage rates set by the Participating Public Agency.

Alternative Pricing for Federal Funding

When applicable, such as when products and services are used in response to an emergency or disaster recovery situation in which federal funding may be used, pricing may not include cost plus a percentage of cost or pricing based on time and materials. If time and materials is necessary in an applicable federal funding situation, a ceiling price that the contract exceeds at its own risk will be needed. In addition, Offeror is subject to and must comply with all federal requirements applicable to the funding including, but not limited, the to the 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II, Required Contract Clauses.

Federal Requirements

If products and services are issued in response to an emergency or disaster recovery the items below, located in this Special Conditions section of the Federal Funds Certifications, are activated and required when federal funding may be utilized.

2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II, Required Contract Clauses

1. Termination for Convenience:

The right to terminate this Contract for the convenience of Region 4 ESC is retained by Region 4 ESC. In the event of a termination for convenience by Region 4 ESC, Region 4 ESC shall, at least ten (10) calendar days in advance, deliver written notice of the termination for convenience to Contractor. Upon Contractor's receipt of such written notice, Contractor immediately shall cease the performance of the Work and shall take reasonable and appropriate action to secure and protect the Work then in place. Contractor shall then be paid by Region 4 ESC, in accordance with the terms and provisions of the Contract Documents, an amount not to exceed the actual labor costs incurred, the actual cost of all materials installed and the actual cost of all materials stored at the project site or away from the project site, as approved in writing by Region 4 ESC but not yet paid for and which cannot be returned, and actual, reasonable and documented demobilization costs, if any, paid by Contractor and approved by Region 4 ESC in connection with the Scope of Work in place which is completed as of the date of termination by Region 4 ESC and that is in conformance with the Contract Documents, less all amounts previously paid for the Work. No amount ever shall be owed or paid to Contractor for lost or anticipated profits on any part of the Scope of Work not performed or for consequential damages of any kind.

2. Equal Employment Opportunity:

Region 4 ESC highly encourages Contractors to implement Affirmative Action practices in their employment programs. This means Contractor should not discriminate against any employee or applicant for employment because of race, color, religion, sex, pregnancy, sexual orientation, political belief or affiliation, age, disability or genetic information.

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: *Provided,* however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the

contractor may request the United States to enter into such litigation to protect the interests of the United States.

3. "During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States."

4. Davis Bacon Act and Copeland Anti-Kickback Act.

   a. Applicability of Davis-Bacon Act. The Davis-Bacon Act only applies to the emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. **It does not apply to other FEMA grant and cooperative agreement programs, including the Public Assistance Program**.

   b. All prime construction contracts in excess of $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction)). See 2 C.F.R. Part 200, Appendix II, ¶ D.

   c. In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.

   d. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

   e. In contracts subject to the Davis-Bacon Act, the contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations at 29 C.F.R. Part 3 (Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States). The Copeland Anti- Kickback Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the

compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to FEMA.

f. The regulation at 29 C.F.R. § 5.5(a) does provide the required contract clause that applies to compliance with both the Davis-Bacon and Copeland Acts. However, as discussed in the previous subsection, the Davis-Bacon Act does not apply to Public Assistance recipients and subrecipients. **In situations where the Davis-Bacon Act does not apply, neither does the Copeland "Anti-Kickback Act."** However, for purposes of grant programs where both clauses do apply, FEMA requires the following contract clause:

"Compliance with the Copeland "Anti-Kickback" Act.

(1) Contractor. The contractor shall comply with 18 U.S.C. § 874, 40U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

(2) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses

(3) Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12."

5. Contract Work Hours and Safety Standards Act.

a. Applicability: This requirement applies to all FEMA grant and cooperative agreement programs.

b. Where applicable (see 40 U.S.C. § 3701), all contracts awarded by the non-Federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations at 29 C.F.R. Part 5. See 2 C.F.R. Part 200, Appendix II, ¶ E.

c. Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek.

d. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or

articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

e. The regulation at 29 C.F.R. § 5.5(b) provides the required contract clause concerning compliance with the Contract Work Hours and Safety Standards Act:

"Compliance with the Contract Work Hours and Safety Standards Act.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier

subcontractor with the clauses set forth in paragraphs (1) through (4) of this section."

6. Rights to Inventions Made Under a Contract or Agreement.

   a. Stafford Act Disaster Grants. This requirement **does not apply to the Public Assistance**, Hazard Mitigation Grant Program, Fire Management Assistance Grant Program, Crisis Counseling Assistance and Training Grant Program, Disaster Case Management Grant Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program, as

FEMA awards under these programs do not meet the definition of "funding agreement."

b. If the FEMA award meets the definition of "funding agreement" under 37 C.F.R. § 401.2(a) and the non-Federal entity wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the non-Federal entity must comply with the requirements of 37 C.F.R. Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by FEMA. See 2 C.F.R. Part 200, Appendix II, ¶ F.

   c. The regulation at 37 C.F.R. § 401.2(a) currently defines "funding agreement" as any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.

7. Clean Air Act and the Federal Water Pollution Control Act. Contracts of amounts in excess of $150,000 must contain a provision that requires the contractor to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C.§§ 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. §§ 1251-1387). Violations must be reported to FEMA and the Regional Office of the Environmental Protection Agency. See 2 C.F.R. Part 200, Appendix II, ¶ G.

   a. The following provides a sample contract clause concerning compliance for contracts of amounts in excess of $150,000:

"Clean Air Act

(1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C.§ 7401 et seq.

(2) The contractor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal

government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

Federal Water Pollution Control Act

(1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

(2) The contractor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA."

8. Debarment and Suspension.

a. Applicability: This requirement applies to all FEMA grant and cooperative agreement programs.

b. Non-federal entities and contractors are subject to the debarment and suspension regulations implementing Executive Order 12549, *Debarment and Suspension* (1986) and Executive Order 12689, *Debarment and Suspension* (1989) at 2 C.F.R. Part 180 and the Department of Homeland Security's regulations at 2 C.F.R. Part 3000 (Non procurement Debarment and Suspension).

c. These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs and activities. See 2 C.F.R. Part 200, Appendix II, ¶ H; and *Procurement Guidance for Recipients and Subrecipients Under 2 C.F.R. Part 200 (Uniform Rules): Supplement to the Public Assistance Procurement Disaster Assistance Team (PDAT) Field Manual* Chapter IV, ¶ 6.d, and Appendix C, ¶ 2 [hereinafter *PDAT Supplement*]. A contract award must not be made to parties listed in the SAM Exclusions. SAM Exclusions is the list maintained by the General Services Administration that contains the names of parties debarred, suspended, or otherwise excluded by

agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. SAM exclusions can be accessed at www.sam.gov. See 2 C.F.R. § 180.530; *PDAT Supplement,* Chapter IV, ¶ 6.d and Appendix C, ¶ 2.

d. In general, an "excluded" party cannot receive a Federal grant award or a contract within the meaning of a "covered transaction," to include subawards and subcontracts. This includes parties that receive Federal funding indirectly, such as contractors to recipients and subrecipients. The key to the exclusion is whether there is a "covered transaction," which is any non-procurement transaction (unless excepted) at either a "primary" or "secondary" tier. Although "covered transactions" do not include contracts awarded by the Federal Government for purposes of the non-procurement common rule and DHS's implementing regulations, it does include some contracts awarded by recipients and subrecipient.

e. Specifically, a covered transaction includes the following contracts for goods or services:

(1) The contract is awarded by a recipient or subrecipient in the amount of at least $25,000.

(2) The contract requires the approval of FEMA, regardless of amount.

(3) The contract is for federally required audit services.

(4) A subcontract is also a covered transaction if it is awarded by the contractor of a recipient or subrecipient and requires either the approval of FEMA or is in excess of $25,000.

d. The following provides a debarment and suspension clause. It incorporates an optional method of verifying that contractors are not excluded or disqualified:

"Suspension and Debarment

(1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R.§ 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by (insert name of subrecipient). If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state agency serving as recipient and name of subrecipient), the Federal

Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions."

9. Byrd Anti-Lobbying Amendment.

   a. Applicability: This requirement applies to all FEMA grant and cooperative agreement programs.

   b. Contractors that apply or bid for an award of $100,000 or more must file the required certification. See 2 C.F.R. Part 200, Appendix II, ¶ I; 44 C.F.R. Part 18; *PDAT Supplement*, Chapter IV, 6.c; Appendix C, ¶ 4.

   c. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. See *PDAT Supplement*, Chapter IV, ¶ 6.c and Appendix C, ¶ 4.

   d. The following provides a Byrd Anti-Lobbying contract clause:

"Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended)

Contractors who apply or bid for an award of $100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient."

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements (To be submitted with each bid or offer exceeding $100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form- LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, Affordable Interior Systems, Inc. (AIS), certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Bryan Poist, CFO

Name and Title of Contractor's Authorized Official

December 5, 2019

Date"

10. Procurement of Recovered Materials.

a. Applicability: This requirement applies to all FEMA grant and cooperative agreement programs.

b. A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, Pub. L. No. 89-272 (1965) (codified as amended by the Resource Conservation and Recovery Act at 42 U.S.C. § 6962). See 2 C.F.R. Part 200, Appendix II, ¶ J; 2 C.F.R. § 200.322; *PDAT Supplement*, Chapter V, ¶ 7.

c. The requirements of Section 6002 include procuring only items designated in guidelines of the EPA at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired by the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

d. The following provides the clause that a state agency or agency of a political subdivision of a state and its contractors can include in contracts meeting the above contract thresholds:

"(1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired—

(i) Competitively within a timeframe providing for compliance with the contract performance schedule;

(ii) Meeting contract performance requirements; or

(iii) At a reasonable price.

(2) Information about this requirement, along with the list of EPA- designate items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive- procurement-guideline-cpg-program."

11. Additional FEMA Requirements.

a. The Uniform Rules authorize FEMA to require additional provisions for non-Federal entity contracts. FEMA, pursuant to this authority, requires or recommends the following:

b. Changes.

To be eligible for FEMA assistance under the non-Federal entity's FEMA grant or cooperative

agreement, the cost of the change, modification, change order, or constructive change must be allowable, allocable, within the scope of its grant or cooperative agreement, and reasonable for the completion of project scope. FEMA recommends, therefore, that a non-Federal entity include a changes clause in its contract that describes how, if at all, changes can be made by either party to alter the method, price, or schedule of the work without breaching the contract. The language of the clause may differ depending on the nature of the contract and the end-item procured.

c. Access to Records.

All non-Federal entities must place into their contracts a provision that all contractors and their successors, transferees, assignees, and subcontractors acknowledge and

agree to comply with applicable provisions governing Department and FEMA access to records, accounts, documents, information, facilities, and staff. See DHS Standard Terms and Conditions, v 3.0, ¶ XXVI (2013).

d. The following provides a contract clause regarding access to records:

"Access to Records. The following access to records requirements apply to this contract:

(1) The contractor agrees to provide (insert name of state agency or local or Indian tribal government), (insert name of recipient), the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

(2) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

(3) The contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract."

12. DHS Seal, Logo, and Flags.

a. All non-Federal entities must place in their contracts a provision that a contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. See DHS Standard Terms and Conditions, v 3.0, ¶ XXV (2013).

b. The following provides a contract clause regarding DHS Seal, Logo, and Flags: "The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre- approval."

13. Compliance with Federal Law, Regulations, and Executive Orders.

    a. All non-Federal entities must place into their contracts an acknowledgement that FEMA financial assistance will be used to fund the contract along with the requirement that the contractor will comply with all applicable federal law, regulations, executive orders, and FEMA policies, procedures, and directives.

    b. The following provides a contract clause regarding Compliance with Federal Law, Regulations, and Executive Orders: "This is an acknowledgement that FEMA financial assistance will be used to fund the contract only. The contractor will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives."

14. No Obligation by Federal Government.

    a. The non-Federal entity must include a provision in its contract that states that the Federal Government is not a party to the contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

    b. The following provides a contract clause regarding no obligation by the Federal Government: "The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract."

15. Program Fraud and False or Fraudulent Statements or Related Acts.

    a. The non-Federal entity must include a provision in its contract that the contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to its actions pertaining to the contract.

    b. The following provides a contract clause regarding Fraud and False or Fraudulent or Related Acts: "The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract."

Additional contract clauses per 2 C.F.R. § 200.325

For applicable construction/reconstruction/renovation and related services: A payment and performance bond are both required for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided in the contract.

Offeror agrees to comply with all terms and conditions outlined in the Special Conditions section of this solicitation.

Offeror's Name:
Affordable Interior Systems, Inc. (AIS)

Address, City, State, and Zip Code:
25 Tucker Drive, Leominster, MA 01453

Phone Number: 978.562.7500 or 800.434.7400 Fax Number:
978.562.0811

Printed Name and Title of Authorized
Representative: Bryan Poist, Chief Financial Officer (CFO)

Email Address:
bpoist@ais-inc.com

Signature of Authorized Representative: 12-5-19 Date:

Appendix C, DOC # 6

QUESTIONNAIRE

Please provide responses to the following questions that address your company's operations, organization, structure and processes for providing products and services.

1. **Diversity Programs**
   - Do you currently have a diversity program or any diversity partners that you do business with? ☒Yes ☐No
     (If the answer is yes, attach a statement detailing the structure of your program, along with a list of your diversity alliances and a copy of their certifications.)

2. **Diverse Vendor Certification Participation**

   Region 4 ESC encourages the use of under-utilized businesses (HUB), minority and women business enterprises (MWBE), and small and/or disadvantages business enterprises (SBE) both as prime and subcontractors. Offerors shall indicate below whether or not they and/or any of their subcontractors (and if so which) hold certification in any of the classified areas and include proof of such certification with their response.

   a. **Minority Women Business Enterprise**
   Respondent certifies that this firm is an MWBE ☐Yes ☒No
   List certifying agency: _____

   b. **Small Business Enterprise (SBE) or Disadvantaged Business Enterprise (DBE)**
   Respondent certifies that this firm is a SBE or DBE ☐Yes ☒No
   List certifying agency: _____

   c. **Historically Underutilized Businesses (HUB)**
   Respondent certifies that this firm is a HUB ☐Yes ☒No
   List certifying agency: _____

   d. **Historically Underutilized Business Zone Enterprise (HUBZone)**
   Respondent certifies that this firm is a HUBZone ☐Yes ☒No
   List certifying agency: _____

   e. **Other**
   Respondent certifies that this firm is a recognized diversity certificate holder ☐Yes ☒No
   List certifying agency: _____

3. Has Offeror made and is Offeror committed to continuing to take all affirmative steps set forth in 2 CFR 200.321 as it relates to the scope of work outlined in this solicitation? ☒Yes ☐No

AIS

Region 4 ESC
Solicitation 19-18
Furniture, Installation and Related Services

Appendix C, Doc #6 Questionnaire

Diversity Statement

As a large business GSA contract holder, AIS is required to submit yearly small business subcontractor plans and reports to GSA. These plans and reports must be approved by GSA and the Small Business Administration (SBA). AIS makes a good faith effort to meet the established small business subcontracting goals while being cognizant of the overall cost to customers. Utilizing small businesses has the potential to reflect an increase in purchasing costs, resulting in inflated selling points. AIS' team of professionals will explore all small business opportunities that fall within our subcontracting plan while avoiding any extended impact on our customers.

AIS has numerous authorized dealers that hold minority status. Certificates for minority status can be provided by the authorized dealer. AIS can offer the following socio-economic set-aside solutions:

- Small Business
- Small Disadvantaged
- Woman Owned
- Woman Owned Small Business
- Veteran Owned Small Business
- Service-Disabled Veteran Owned Small Business
- HUBZone
- 8(a)
- And more

Set aside certifications can be supplied upon request.

RECEIPT OF ADDENDUM NO. 1 ACKNOWLEDGEMENT

Offeror shall acknowledge this addendum by signing below and include in their proposal response.

Company Name Affordable Interior Systems, Inc. (AIS)

Contact Person Bryan Poist, CFO

Signature Bryan Poist

Date 12-5-19

Crystal Wallace
Region 4 Education Service Center
Business Operations Specialist

Dealer Company Name	City	State
AMJ Campbell Vanlines (Edmonton)	Edmonton	AB
AMJ Office Interiors (Calgary)	Calgary	AB
Indoff (Edmonton)	Edmonton	AB
Office Concepts Incorporated (AB)	Calgary	AB
RGO Office Products	Edmonton	AB
Solutions Business Interiors	Edmonton	AB
Stor Office Furniture	Calgary	AB
AA-K Business Environments, Inc.	Anchorage	AK
Alabama Contract Sales, Inc.	Auburn	AL
A-Z Office Resource, Inc (AL1) DBA West Business Interiors	Madison	AL
B & L Associates, Inc	Montgomery	AL
Bruce Office Supply and Furniture	Birmingham	AL
Burgess Commercial Interiors	Birmingham	AL
Business Interiors (AL)	Birmingham	AL
Cox Commercial Interiors	Birmingham	AL
DeKalb Office (AL)	Birmingham	AL
Facilities Resource Group, Inc.	Spanish Fort	AL
Indoff (AL2)	Birmingham	AL
Indoff (AL5)	Birmingham	AL
Indoff (AL7)	Decatur	AL
Innerspaice Architectural Interiors - North	Birmingham	AL
Innerspaice Architectural Interiors - South	Mobile	AL
Interior Elements, LLC - Birmingham	Birmingham	AL
Klein Enterprises, LLC	Montgomery	AL
Kyle Office Solutions	Tuscaloosa	AL
Kyser OfficeWorks Inc.	Montgomery	AL
McAleer's Office Furniture	Mobile	AL
OEC (Mobile)	Mobile	AL
OFCworkscapes	Pelham	AL
Office Environments, Inc. (AL)	Birmingham	AL
Office Interiors By Osco Inc.	Decatur	AL
Printers & Stationers, Inc	Florence	AL
Red Rhino Office	Tuscaloosa	AL
Southeast Distribution Services, DBA Business Environment	Birmingham	AL
Spur Plantation, LLC	Montgomery	AL
Workspace Interiors LLC	Mobile	AL
Division 12 Consulting	Birmingham	AL
Burris, Inc.	Russellville	AR
Cousins Office Furniture	Rogers	AR
Indoff (AR4)	Bentonville	AR
Indoff (AR5)	Maumelle	AR
Innerplan Office Interiors	North Little Rock	AR
JMP Industries Inc. d/b/a Allied Corporate Furniture	Jonesboro	AR
LaHarpe's	Little Rock	AR
Norman Co.	Ft. Smith	AR
Southern Office Services, Inc	Little Rock	AR
Pettus Office Products (Little Rock)	Little Rock	AR
Arizona School Furnishings	Phoenix	AZ
Creative Office Solutions (AZ)	Phoenix	AZ
Elontec	Phoenix	AZ
Facilitec Inc. (AZ)	Phoenix	AZ
Faciliteq (AZ)	Tempe	AZ
FineWal Office Solutions	Phoenix	AZ
Furniture Resource & Design, LLC	Chandler	AZ
Interior Solutions of Arizona, LLC	Phoenix	AZ
JKaiser Workspaces, LLC	Tucson	AZ
Tucson Business Interiors, Inc.	Tucson	AZ
Brooks Corning Company, Ltd.	Vancouver	BC
Canada Chairlines Ltd	Vancouver	BC
Encore Office Interiors	Maple Ridge	BC
Heritage Office Furnishings	Vancouver	BC
M & E Business Furnishings	Port Coquitlam	BC
Westport Group	Vancouver	BC
2010 Office Furniture Inc	South El Monte	CA

Dealer Company Name	City	State
Affordable Office Furniture	Yuba City	CA
All Systems Go Furniture, Inc.	Escondido	CA
Alternative Workspace Solutions, LLC	Gilroy	CA
BBI Interiors	Costa Mesa	CA
Better Source Liquidators, LLC	Campbell	CA
Blaisdell's Business Products	Oakland	CA
CA Office Interiors	Cerritos	CA
Caliber Office Furniture, LLC	Redding	CA
CDS Office Interiors, LLC	Irvine	CA
CN School & Office Solutions, Inc.	Corona	CA
Contract Interior Consultants, Inc.	Santa Ana	CA
Contract Office Group	San Jose	CA
CORE Business Interiors	Fresno	CA
Corporate Design Group, Inc.	Roseville	CA
Corporate Furniture Solutions	San Jose	CA
Corporate Modular Services Inc.	Orange	CA
COV Workplace Interiors	Poway	CA
COV Workplace Interiors (Fullerton)	Fullerton	CA
Cov Workplace Interiors (San Leandro)	San Leandro	CA
Cultura	San Diego	CA
Durst Contract Interiors	Stockton	CA
Esplanade Office	Chico	CA
Executive Business Products (CA)	Fresno	CA
FMI Office Space Development, LLC	Commerce	CA
Gazor Group, Inc.	San Francisco	CA
General Business Projects dba CoDesign	San Francisco	CA
Global Concepts	Carmel Valley	CA
Hamel School Outfitters, Inc	Murrieta	CA
Hoovers Commercial Services, Inc. dba Be. Workplace Design	Concord	CA
Indoff (CA10)	Bakersfield	CA
Indoff (CA46)	Hanford	CA
Indoff (CA48)	Lake Elsinore	CA
Indoff (CA49)	Chula Vista	CA
Indoff (CA50)	Saratoga	CA
Indoff (CA51)	Benicia	CA
Indoff (CA52)	Santa Ana	CA
Indoff (CA53)	Campbell	CA
Indoff (CA54)	Martinez	CA
Indoff (CA6)	Orange	CA
Innovative Commercial Environments (ICE)	San Diego	CA
Innovative Office Solutions - Anaheim	Anaheim	CA
Inside Source, Inc.	San Carlos	CA
Integrated Office Interiors (CA1)	Watsonville	CA
Interior Office Systems, Inc. (Thousand Oaks) DBA Spear Enterprises	Thousand Oaks	CA
Interior Resources 2	Rancho Santa Margarit	CA
Interiors Incorporated	Santa Rosa	CA
KBM-Hogue	San Jose	CA
Key International, Inc. (CA)	Gardena	CA
Marsha Jurasin & Associates	Burlingame	CA
MCI Workplace Solutions Inc.	Hayward	CA
MG West (CA1)	San Francisco	CA
Northern Office Products And Office Furniture	El Centro	CA
NRS Inc.	Pomona	CA
Nuspace Corporate Interiors	Campbell	CA
Pacific Office Interiors (POI)	Agoura Hills	CA
Palace Business Solutions	Santa Cruz	CA
PeopleSpace (Irvine)	Irvine	CA
PeopleSpace (Los Angeles)	Los Angeles	CA
Poletti Associates, Inc.	Woodside	CA
Professional Modular Installations, LLC	Corona	CA
Seats and Stations	Roseville	CA
Shore Total Office	San Diego	CA
Sierra School Equipment	Bakersfield	CA
SLM Contract Furniture	San Diego	CA

Dealer Company Name	City	State
SourceOne Office Products	Santa Fe Springs	CA
Strategic Furniture Group dba Group Vivo	Torrance	CA
Systems Source, Inc	Newport Beach	CA
Tab Products (CA)	San Francisco	CA
The Office City	Redwood City	CA
Top Drawer Design	Mission Viejo	CA
Total Corporate Solutions	Torrance	CA
Total Office	Calexico	CA
Totalplan Business Interiors, Inc.	Riverside	CA
Unilav	Los Angeles	CA
Unisource Solutions (Hayward)	Hayward	CA
Unisource Solutions (Pico Rivera)	Pico Rivera	CA
Veterans Interiors Solutions	San Jose	CA
Western Contract Furnishers	Rancho Cordova	CA
Workspace Connexions	San Jose	CA
A&J Commercial Interiors	Windsor	CO
Affordable Moving	Centennial	CO
Blue Skies Furniture LLC	Colorado Springs	CO
Boulder Commercial Interiors	Boulder	CO
Broxton Design & Development, Inc.	Denver	CO
Canter	Lakewood	CO
Caribou Venture Group, LLC	Longmont	CO
Desks Incorporated	Denver	CO
Elontec (CO)	Centennial	CO
Government Contract Sales, Inc	Lakewood	CO
ICE3D	Greenwood Village	CO
Indoff (CO11)	Golden	CO
Indoff (CO12)	Littleton	CO
Indoff (CO13)	Boulder	CO
Indoff (CO14)	Denver	CO
Indoff (CO15)	Castle Rock	CO
Indoff (CO16)	Golden	CO
Interior Concepts	Denver	CO
Merchants Office Furniture	Denver	CO
Office Interiors Denver	Westminster	CO
Office Outfitters & Planners	Grand Junction	CO
OfficeScapes (CO1)	Denver	CO
OfficeScapes (CO2)	Colorado Springs	CO
OfficeScapes (CO3)	Fort Collins	CO
Pear Workplace Solutions	Denver	CO
Piedmont Office Suppliers (CO)	Aurora	CO
Q+E Design Source (CO)	Denver	CO
RMRM Inc. Business Environments	Colorado Springs	CO
SameDay Office Supply	Louisville	CO
Springhaus Design	Timnath	CO
Workplace Partners	Fort Collins	CO
Workspace Elements DBA Workspace Innovations	Fort Collins	CO
Arenson Office Furnishings (CT)	Stamford	CT
Corporate Office Specialists	West Hartford	CT
Creative Office Interiors	Hartford	CT
DeClercq Office Group (DOG)	Hamden	CT
Indoff (CT1)	Trumbull	CT
Insalco Corporation	Wallingford	CT
Jefferson Group, LLC	Stamford	CT
John Watts Associates	Hartford	CT
OFI (Newington)	Newington	CT
People Places and Spaces, LLC	West Hartford	CT
Red Thread (CT)	East Hartford	CT
Robert H. Lord Company	Manchester	CT
Strategic Spaces LLC (CT)	Trumbull	CT
Suburban Inc.	Middletown	CT
Trademark Corporate dba Adform	Manchester	CT
W.B. Mason (E. Windsor)	E. Windsor	CT
W.B. Mason (Hamden)	Hamden	CT

Dealer Company Name	City	State
W.B. Mason (Norwalk)	Norwalk	CT
W.B. Mason (Old Lyme)	Old Lyme	CT
Workspace Consulting Group	Stamford	CT
EvensonBest, LLC (DC)	Washington	DC
MOI (VA1)	Washington	DC
Peabody Office Furniture (DC)	Washington	DC
Price Modern of DC (MD3)	Washington	DC
The Forum	Washington	DC
W.B. Mason (DE)	Newark	DE
Haworth NOLA	Mexico City	DF
Planeacion, Ambientacion Y Proyectos, S.A. de C.V. - Mexico City	Mexico City	DF
Moduloffice	Santo Domingo	DN
Muebles Omar, S.A.	Santo Domingo	DR
A to Z Furnishings	Pensacola	FL
Accent Office Interiors	Tallahassee	FL
Advanced Furniture Solutions	Jacksonville	FL
All American Office Furniture	Fort Myers	FL
Apricot Office Furniture	Miami Gardens	FL
B & B Furniture Concepts	Melbourne	FL
Boca Office Furniture, LLC.	Boca Raton	FL
Business Interior Group, Inc	DeBary	FL
Business Office Systems (Lake Mary)	Lake Mary	FL
Business Resource, Inc.	Sarasota	FL
Center Line Associates, LLC	Fort Walton Beach	FL
Central Florida Office Supply	Gainesville	FL
CK Office Designs	Coral Springs	FL
Commercial Design Services, Inc. (Jacksonville)	Jacksonville	FL
Commercial Design Services, Inc. (Orlando)	Altamonte Springs	FL
Commercial Design Services, Inc. (Tallahassee)	Tallahassee	FL
Commercial Design Services, Inc. (Tampa)	Tampa	FL
Commercial Works (FL)	Orlando	FL
Contract Furniture Options LLC	Jacksonville	FL
Corporate Design Choice, Inc.	Miami	FL
Empire Office (FL)	Hollywood	FL
Empire Office (FL2)	Tampa	FL
Empire Office (FL3)	Orlando	FL
Ernie Morris Enterprises, Inc.	Bushnell	FL
Florida Business Interiors - Tampa	Tampa	FL
Florida Office Interiors	Jacksonville	FL
Global Commercial Furnishings, Inc.	Wellington	FL
HiTouch Business Services - Jacksonville	Jacksonville	FL
HiTouch Business Services - Tampa	Tampa	FL
Indoff (FL11)	Pembroke Pines	FL
Interior Contract Services, Inc.	Orlando	FL
Interior Fusion - Jacksonville	Jacksonville	FL
Interior Fusion LLC	St Petersburg	FL
JC White Architectural - Miramar	Miramar	FL
M Hanson and Company, Inc.	Fort Lauderdale	FL
Modular Office Environments, Inc	Oakland Park	FL
New Studio, LLC	Boca Raton	FL
OEC (Pensacola)	Pensacola	FL
Office Dimensions, Inc.	Miami	FL
Office Environments & Services (OE&S)	Jacksonville	FL
Office Environments, Inc. (FL2)	Pensacola	FL
Office Furniture & Design Concepts	Ft Myers	FL
Office Furniture Solutions of Florida, LLC	Pompano Beach	FL
Office Liquidation Inc.	Orlando	FL
Office ReWorks, Inc.	Pompano Beach	FL
Office Worx, Inc.	Oldsmar	FL
OfficeFurniture4Sale	Hialeah	FL
Perdue Office Interiors	Jacksonville	FL
Pradere Manufacturing	Hialeah Gardens	FL
RKR & Associates, LLC	Ocala	FL
Suddath Office Solutions	Jacksonville	FL

Dealer Company Name	City	State
The CI Group	Jacksonville	FL
The CI Group - Boca Raton	Boca Raton	FL
W.B. Mason (FL)	Orlando	FL
Workspace2/Integrated Furniture Solutions	Palm Harbor	FL
Wrk Lab, Inc.	Doral	FL
5 Star Office Furniture, Inc	Avondale Estates	GA
Atlanta Business Products Inc.	Atlanta	GA
Atlanta Office Center	Atlanta	GA
Atlanta Office Furniture	Norcross	GA
Atlanta Office Liquidators Inc.	Atlanta	GA
Barth Associates	Kennesaw	GA
Best Office Solutions	Waynesboro	GA
Business Environments (GA)	Atlanta	GA
Business Transition 360	Dacula	GA
Carrollton Office Equipment Company, Inc.	Carrollton	GA
Cessi Ergonomics	Atlanta	GA
Classic Office Interiors	Norcross	GA
Consultants & Builders, Inc	Duluth	GA
Contract Business Interiors, Inc.	East Point	GA
Creative Office Design, Inc (GA)	Dunwoody	GA
CWC, LLC	Atlanta	GA
Design Management Associates, Inc.	Kennesaw	GA
Diversified Resource Group	Norcross	GA
Envision Office Solutions	Milton	GA
Fens Associates (GA)	Alpharetta	GA
Franklin McNeal, Ltd.	Atlanta	GA
Indoff (GA5)	Oxford	GA
Indoff (GA6)	Fayetteville	GA
Indoff (GA7)	Macon	GA
Indoff (GA8)	Woodstock	GA
Johnson's Office Solutions, Inc.	Hazlehurst	GA
Loy's Office Supply	LaGrange	GA
Malone Office Environments	Columbus	GA
Mason, Inc.	Thunderbolt	GA
McGarity's Business Products	Gainesville	GA
Metro Commercial Furniture	Dallas	GA
Modern Business Systems, Inc. (GA)	Augusta	GA
MOFCO-LLC	Atlanta	GA
Nowak Office Solutions	Canton	GA
Office Furniture Resources	Norcross	GA
Office Images, Inc	Roswell	GA
Office Interiors (GA)	Atlanta	GA
Panel Systems Unlimited	Tucker	GA
Pure Office Environments	Peachtree Corners	GA
R3 Office Solutions	Lawrenceville	GA
Sheffield Office Products	Duluth	GA
Source America	Douglasville	GA
TurnerBoone Contract	Atlanta	GA
Weinberger's Business Interiors	Augusta	GA
OnPointe Atlanta, LLC	Suwanee	GA
Infinium Interiors, Inc.	Honolulu	HI
Office Furniture Solutions (HI)	Aiea	HI
The Systemcenter, Inc.	Honolulu	HI
Beirman Furniture	Urbandale	IA
Indoff (IA9)	Altoona	IA
Saxton	Des Moines	IA
Triplett Office Essentials Corporation	Des Moines	IA
Business Interiors of Idaho	Boise	ID
Complete Office (ID)	Boise	ID
Idaho Correctional Industries	Boise	ID
Office Environment Co.	Boise	ID
Workspace Concepts	Nampa	ID
Affordable Office Interiors - Roselle	Roselle	IL
APEX Design Build	Rosemont	IL

Dealer Company Name	City	State
Applied Ergonomics	Skokie	IL
Axios Office Solutions Inc.	Mokena	IL
Business Office Systems - Carol Stream	Carol Stream	IL
Business Office Systems - Chicago	Chicago	IL
Everything Division 12, Inc	Chicago	IL
Forward Space	Chicago	IL
Illini Supply, Inc.	Forsyth	IL
Indoff (IL2)	Carmel	IL
Indoff (IL3)	Chicago	IL
Indoff (IL5)	Alhambra	IL
Indoff (IL6)	Chatham	IL
Kayhan International	Schaumburg	IL
Kentwood Office Furniture (IL)	Lombard	IL
Key Interior Design	Lombard	IL
Louer Facility Planning, Inc.	Collinsville	IL
Office Revolution, LLC	Bannockburn	IL
Rightsize Facility Performance	Chicago	IL
SEAATS	Chicago	IL
Terrace Interiors Inc	Lisle	IL
Advanced Office Logistics	Indianapolis	IN
Baker Street Office Furnishings	Ft. Wayne	IN
Business Furniture Specialists, Inc. (dba Business Environments)	Evansville	IN
Business Furniture, LLC (Indianapolis)	Indianapolis	IN
Commercial Office Environments	Indianapolis	IN
Commercial Works (IN)	Indianapolis	IN
Complete Office Supply	Indianapolis	IN
Corporate Design, Inc.	Evansville	IN
d2p	Indianapolis	IN
ESP Business Furnishings	Indianapolis	IN
Indoff (IN5)	Mitchell	IN
Indoff (IN6)	Layfayette	IN
Indoff (IN7)	Chesterton	IN
iSpace Office Interiors	Indianapolis	IN
Jack Laurie Business Furniture	Fort Wayne	IN
Kentwood Office Furniture - Indianapolis	Indianapolis	IN
Office Installation Services, Inc.	Indianapolis	IN
Premier Furnishing Solutions	Newburgh	IN
RJE BUSINESS INTERIORS	Indianapolis	IN
Benson Method, LLC	Overland Park	KS
Indoff (KS7)	Girard	KS
Key Office Products (KS)	Dodge City	KS
Pure Workplace Solutions	Prairie Village	KS
Quality Interiors Group	Overland Park	KS
United Office Products	Olathe	KS
Commercial Works (KY1)	Louisville	KY
Hosea Project Movers	Covington	KY
KDA Office Furniture Solutions	Lexington	KY
Luckett & Farley Procurement, LLC	Louisville	KY
Office Resources Inc.	Louisville	KY
The RCF Group (KY)	Louisville	KY
Associated Office Systems (AOS)	NEW ORLEANS	LA
B & B Enterprises of Lafayette, LLC	Lafayette	LA
Frost-Barber, Inc.	Baton Rouge	LA
GBP Direct	Kenner	LA
General Office Supply (LaFayette)	LaFayette	LA
KV Workspace, LLC	Mandeville	LA
Lake Charles Office Supply	Lake Charles	LA
Modern Market	New Orleans	LA
MyOfficeProducts (LA)	Harahan	LA
Pettus Office Products (Bossier City)	Bossier City	LA
Pettus Office Products (Monroe)	Monroe	LA
Sayes Office Supply	Alexandria	LA
B2B Holdings, Inc. d/b/a Alpha Office Furniture	Uxbridge	MA
BBE Office Interiors	Pittsfield	MA

Dealer Company Name	City	State
Broadway Office Interiors	Springfield	MA
Chuck Marshall	Boston	MA
Environments at Work	Boston	MA
Facility Management Consultants	Boston	MA
Fens Associates (MA)	Groveland	MA
Ideal Office Solutions	Methuen	MA
J&J Moving Installing and Storage Inc.	Seekonk	MA
Key Office Interiors	Boston	MA
Legacy Office Solutions	Milford	MA
Lexington Group	West Springfield	MA
National Premier Partner (Corporate)	Newton	MA
Office Concepts, Inc. (MA)	Beverly	MA
Office Resources (MA)	Boston	MA
Peabody Office Furniture	Boston	MA
Red Thread	Boston	MA
Red Thread (MA2)	Marlborough	MA
Resources for Office Interiors	Sudbury	MA
ROI Industries	Fitchburg	MA
Strategic Space	Boston	MA
Tactical Office Solutions (MA)	Haverhill	MA
The M1 Project	Boston	MA
W.B. Mason (Greenfield)	Greenfield	MA
W.B. Mason (Hyannis)	Hyannis	MA
W.B. Mason (Worcester)	Worcester	MA
W.B. Mason Co., Inc (Woburn)	Woburn	MA
W.B. Mason Co., Inc. (Boston)	Boston	MA
W.B. Mason Co., Inc. (Brockton)	Brockton	MA
W.B. Mason Co., Inc. (Framingham)	Framingham	MA
Wayfair - Online Furniture	Boston	MA
Wayfair - Projects	Boston	MA
Workplace Resource	Worcester	MA
Office Outlets LLC	Arnold	MD
Anthony Allan Office Furnishings	Winnipeg	MB
American Design Associates	Baltimore	MD
Business Interiors & Design, Inc.	Damascus	MD
Contract Furniture Options, Inc. (MD)	Bethesda	MD
Contract Interior Services, Inc.	Annapolis	MD
Dancker, Sellew & Douglas (Baltimore)	Baltimore	MD
Dancker, Sellew & Douglas (Capitol Heights)	Capitol Heights	MD
Enterprise Furniture Consultants - EFC	Baltimore	MD
Glover Furniture & Design Group, Inc	Towson	MD
HiTouch Business Services - Maryland	Annapolis Junction	MD
Impact Office	Beltsville	MD
Interior Resource Group, Inc.	Owings Mills	MD
Lewis Stevenson Office Solutions (MD)	Nottingham	MD
Mark Downs 2.0, Inc.	Cockeysville	MD
Martek Global Services, Inc.	Bethesda	MD
MOI (MD1)	Baltimore	MD
National Harbor Interiors	National Harbor	MD
Price Modern of Washington (MD2)	Lanham	MD
Price Modern, LLC	Baltimore	MD
W.B. Mason (MD)	Columbia	MD
Washington Office Interiors, LLC	Silver Spring	MD
wurkSPACE	Baltimore	MD
Maine Business Furniture, Inc.	Westbrook	ME
Office Resources (ME)	Portland	ME
Red Thread (ME)	Westbrook	ME
Tab Office Systems, Inc (ME1)	Saco	ME
W.B. Mason (ME1)	Portland	ME
Affordance Office Environments	Warren	MI
AIREA Inc.	Southfield	MI
DBI Business Interiors, Inc.	Lansing	MI
Indoff (MI3)	Grand Rapids	MI
Interphase Interiors	Grand Rapids	MI

Dealer Company Name	City	State
ISCG	Royal Oak	MI
Jones Office Interiors	Ann Arbor	MI
Kentwood Office Furniture LLC	Grand Rapids	MI
Metro Office Environments, Inc.	Warren	MI
Michigan Office Environments	Kalamazoo	MI
Office Express	Troy	MI
Rightsize Facility Performance (MI)	Southfield	MI
SBD Commercial Interiors	Grass Lake	MI
SPACE, Inc.	Midland	MI
SpaceCare Interiors	Berkeley	MI
Standard Office Supply (MI)	Port Huron	MI
The Office Connection	Farmington Hills	MI
The Office Supply Guys	Madison Heights	MI
UP Office Furnishings, Inc	Iron Mountain	MI
Wolverine Office Interiors	Ann Arbor	MI
Form and Function	Bay City	MI
Kelly Hansen Interiors DBA Mid-Michigan Commercial Interiors	Howell	MI
Pinnacle Design	Saginaw	MI
The Office Shop	Aitkin	MN
Great Journey West, LLC	Saint Charles	MO
Indoff (KS8)	Kansas City	MO
Indoff (MO9)	Maryland Heights	MO
The Maurer Group LLC, dba Interior Planning Associates	Saint Louis	MO
Alternative Business Furniture, Inc.	Eden Prairie	MN
Brooks Office Interiors, Inc.	Minneapolis	MN
Fluid Interiors	Minneapolis	MN
General Office Products Co.	Minneapolis	MN
Ideal Commercial Interiors	New Hope	MN
iSpace	Minneapolis	MN
Northern Business Products	St. Cloud	MN
Spectrum Interiors	Burnsville	MN
Tuohy Furniture	Chatfield	MN
Turner Office Resources	Shoreview	MN
Affinity Office Furniture	Columbia	MO
Color Art Office Interiors, Inc.	St. Louis	MO
Commercial Interior Services of St Louis	Saint Peters	MO
Contract Furnishings (MO)	Kansas City	MO
encompas	Kansas City	MO
Indoff (GA9)	St. Louis	MO
Indoff (MO10)	Springfield	MO
Indoff (MO8)	Springfield	MO
Interior Dimension, Inc.	Nixa	MO
NewSpace Business Interiors	St. Louis	MO
Olson Office LLC	Independence	MO
Professional Office Environments	Maryland Heights	MO
Trilogie LLC	Kansas City	MO
Business Interiors (MS)	Ridgeland	MS
Commercial Business Interiors	Hattiesburg	MS
Gulf Copy Systems	Gulfport	MS
Indoff (MS1)	Jackson	MS
Interior Elements, LLC	Ridgeland	MS
Kimbrell Office Supply Co., Inc.	Natchez	MS
OEC (Gulfport)	Gulfport	MS
Office Furniture Solutions (MS)	Gulfport	MS
Sullivan's Office Supply (MS)	Starkville	MS
Whittington Office Furniture	Tupelo	MS
360 Office Solutions	Billings	MT
Office Solutions & Services	Missoula	MT
Western Office Equipment	Great Falls	MT
All American Office Solutions	Raleigh	NC
Bumbarger's, Inc	Hickory	NC
Business Furniture Solutions (NC)	Greensboro	NC
Carolina Office Exchange	Raleigh	NC
Commercial Works (NC1)	Charlotte	NC

Dealer Company Name	City	State
Commercial Works (NC2)	Morrisville	NC
Connecting Elements, Inc.	Charlotte	NC
Contract Business Solutions, Inc	Winston Salem	NC
Corporate Interiors & Sales, Inc.	Fayetteville	NC
Edge Office	Raleigh	NC
FSI Inc. (NC)	Charlotte	NC
FSI Office	Charlotte	NC
Furniture Solutions Plus / Piedmont Facilities Services	Winston Salem	NC
HICAPS Inc.	Greensboro	NC
Indoff (NC12)	Greensboro	NC
Indoff (NC14)	Charlotte	NC
Indoff (NC19)	Sneads Ferry	NC
Indoff (NC20)	Charlotte	NC
Indoff (NC21)	Greensboro	NC
Indoff (NC4)	Wilmington	NC
Indoff (NC8)	Raleigh	NC
Indoff (NC9)	Zebulon	NC
Indoff Western NC	Chandler	NC
Institutional Interiors Inc. (Raleigh)	Raleigh	NC
J. Morgan Design Associates, Inc.	Greenville	NC
Lake Norman Office Furniture	Huntersville	NC
National Contract Furniture	Raleigh	NC
Office Furniture Concepts, Inc.	Wilkesboro	NC
Office Interior Systems, LLC	Chapel Hill	NC
Piedmont Office Supplies (NC)	Greensboro	NC
PMC Commercial Interiors (Charlotte)	Charlotte	NC
PMC Commercial Interiors (Morrisville)	Morrisville	NC
Professional Business Interiors	Asheville	NC
RE Workspaces (Rivers Edge NC)	Winston-Salem	NC
Stephens Office Systems, Inc.	Charlotte	NC
ValueBiz	Charlotte	NC
Veteran Office Design	Charlotte	NC
Christianson's Business Furniture Plus	Fargo	ND
Hannahers	Fargo	ND
Rough Rider Industries / State of North Dakota	Bismarck	ND
Bold Office Solutions	Omaha	NE
Indoff (NE2)	Omaha	NE
Indoff (NE5)	Omaha	NE
Pay-LESS Office Products	Omaha	NE
Sheppards Business Interiors (Omaha)	Omaha	NE
Provision Workspaces	Salem	NH
Interior Innovations	Syracuse	NY
Tech Valley Office Interiors	New York	NY
Element	Portsmouth	NH
Joe's Discount Office Furniture	Salem	NH
Office Interiors ltd	Dover	NH
Office Resources (NH1)	Manchester	NH
Office Resources (NH2)	Portsmouth	NH
Red Thread (NH2)	Manchester	NH
Re-Source Office Furniture	Salem	NH
W.B. Mason (NH)	Manchester	NH
Allstate Office Interiors, Inc.	Robbinsville	NJ
ARD Facilities Management Group LLC DBA Paramount	Branchburg	NJ
Arenson Office Furnishings (NJ)	Woodbridge	NJ
Bellia Office Furniture	Woodbury	NJ
Commercial Furniture Interiors, Inc.	Mountainside	NJ
Complete Furniture Solutions	Tinton	NJ
County Business Systems	Pennington	NJ
Dancker, Sellew & Douglas (NJ1)	Somerville	NJ
Design Alternatives	Scotch Plains	NJ
Focus Interior Products LLC	Berkeley Heights	NJ
Furniture Consultants (NJ)	Morristown	NJ
FurniturePlan, Inc	Cream Ridge	NJ
Glenwood Office Furniture (NJ2)	Hillside	NJ

Dealer Company Name	City	State
HiTouch Business Services (NJ)	SADDLE BROOK	NJ
JC Office Consultants	Somerville	NJ
Jey Furniture LLC	Lakewood	NJ
K Offices	Manalapan	NJ
KAD Associates	Woodbridge	NJ
Lisa Fairclough Enterprises	Newton	NJ
M C Office Furniture, Inc	Maplewood	NJ
M2 Enterprises	Mine Hill	NJ
Millennium Office Solutions	Orange	NJ
Next Generation Interiors	Dover	NJ
Next Office Furniture	KENILWORTH	NJ
Nickerson Corporation (NJ)	Union Beach	NJ
NJ Office Furniture Depot	Monroe	NJ
Palazzo Interiors	Titusville	NJ
PTI Office Furniture	Ridgefield	NJ
W.B. Mason (NJ1)	Secaucus	NJ
W.B. Mason (NJ2)	Egg Harbor Township	NJ
W.B. Mason (NJ3)	Cranbury	NJ
W.B. Mason (PA1)	Bellmawr	NJ
W.S. Goff Company Inc.	Mays Landing	NJ
WB Wood (NJ)	Basking Ridge	NJ
Workspaces	Escobedo	NL
Albuquerque Office Systems, LLC	Albuquerque	NM
Business Environments (NM)	Albuquerque	NM
Contract Associates Inc.	Albuquerque	NM
Indoff (NM2)	Albuquerque	NM
Tema Contemporary Furniture	Albuquerque	NM
Atlantic Business Interiors	Dartmouth	NS
Ergoworks	Dartmouth	NS
Office Interiors (Nova Scotia)	Dartmouth	NS
Faciliteq Business Interiors	Las Vegas	NV
FUSCH COMMERCIAL INTERIORS & DESIGN	Las Vegas	NV
Marrcor inc.	Las Vegas	NV
Nevada Business Furniture	Las Vegas	NV
Office Suppliers, Inc.	Las Vegas	NV
A.C. Desk Co., Inc.	Mineola	NY
ADA Business Supplies	Brooklyn	NY
Adirondack Tool Co Inc, dba Commercial Sales	Plattsburgh	NY
AFD Contract Furniture Inc.	New York	NY
Alianza Services LLC	Nyack	NY
Alliance Transfer	Brooklyn	NY
AMC Transfer, Inc.	Oceanside	NY
Arenson Office Furnishings (NY1)	New York City	NY
Bell Yorktown, Inc.	Bedford Hills	NY
Benhar Office Interiors	New York	NY
BFI (NY2)	New York	NY
Broadway Office Furniture (NYC)	New York	NY
Buffalo Office Interiors	Buffalo	NY
Charlie's Office Furniture, Inc.	Queensbury	NY
Complete Office Furniture	Brooklyn	NY
Contract Furniture Services Inc.	Rochester	NY
Contract Interior Solutions, LLC.	Lakewood	NY
COOLEY GROUP INC	Rochester	NY
Corporate Office Furniture (New York)	Bohemia	NY
Cubicles.com	Long Island City	NY
D.A.F. Office Networks Inc.	Cicero	NY
DRB Business Interiors	Saratoga Springs	NY
Eaton Office Supply	Amherst	NY
ELLIOTT INTERIORS LLC	Goshen	NY
Empire Office Furniture	New York	NY
EvensonBest, LLC (NY1)	New York	NY
Facilities Equipment and Service, Inc.	Pittsford	NY
Facilities Exchange	New York City	NY
Fern Office Supplies	Monsey	NY

Dealer Company Name	City	State
FM Office Express Inc (NYC)	Bayside	NY
FM Office Products	Rochester	NY
Government Office Furniture	New York	NY
Grassroots Contract Interiors LLC	Buffalo	NY
HiTouch Business Services (NY)	New York	NY
Hudson Valley Office Furniture, Inc.	Poughkeepsie	NY
Hummel's Office Plus	Mohawk	NY
Indoff (NY15)	New York Mills	NY
Indoff (NY18)	Staten Island	NY
Interior Solutions of WNY LLC	Buffalo	NY
Just the Right Stuff, Inc	Syracuse	NY
Kimberly Scott Inc	Albany	NY
L.P.S. Office Interiors	Framingdale	NY
Lane Office Furniture	New York	NY
LB's Furniture Solutions, LLC	Spencerport	NY
Lewis Stevenson Office Solutions (NY)	New York	NY
Lincoln Office Systems, Inc. (NY)	Brooklyn	NY
LLV Office Concepts, LLC	Saratoga Springs	NY
Meadows Office Furniture (NY1)	New York	NY
Millington Lockwood Business Interiors	BUFFALO	NY
MJP Environments, Inc.	Massapequa	NY
Nathan Office Interiors LLC	Slingerlands	NY
Nickerson Corporation (NY)	Rochester	NY
Office Environment Consulting, Inc.	Oneida	NY
Office Furniture Direct (NY)	Farmingdale	NY
Office Furniture Heaven	New York	NY
OFFICE FURNITURE INC.	Westbury	NY
Office Resources (NY)	New York	NY
Peck's Office Plus	Brooklyn	NY
Prentice Office Env/ Office Furniture Ctr	Tonawanda	NY
Pucci Carpet & Furniture Inc.	Fredonia	NY
Ray Hess Business Interiors	New York	NY
Renotech Interiors	Tappan	NY
Right Price Companies,Inc.	Syracuse	NY
Rochester Office Interiors	Pittsford	NY
School Furniture and Interiors, LLC	Rochester	NY
Sedgwick Business Interiors	Syracuse	NY
Seely Conover's Office Centre, Inc.	Amsterdam	NY
Smart Space, LLC.	New York	NY
Standard Commercial Interiors	Albany	NY
Stevens Office Interiors	Syracuse	NY
Studio Office Solutions LLC	New York	NY
Sustainable Office Solutions, LLC	Liverpool	NY
Syracuse Office Environments	Syracuse	NY
The Furnished Office	New York	NY
The Irishmen on the Hudson	Rockville Center	NY
The Office Furniture Warehouse	Islandia	NY
The Syracuse Business Center Inc.	Syracuse	NY
The Telcar Group	Holbrook	NY
Tower Furniture Sales	Lawrence	NY
Tri State Office Interiors	New York	NY
Turf Office Supplies	Brooklyn	NY
Upstate Office Furniture	Johnson City	NY
VRD Contracting Inc	Holbrook	NY
W.B. Mason (Buffalo)	Buffalo	NY
W.B. Mason (NY1)	New York	NY
W.B. Mason (NY2)	Albany	NY
W.B. Mason (NY3)	Hauppauge	NY
W.B. Mason (NY4)	Syracuse	NY
W.B. Mason (NY5)	Newburgh	NY
W.B. Mason (NY6)	The Bronx	NY
Waldner's Business Environments (Farmingdale)	Farmingdale	NY
Waldner's Business Environments (NYC)	New York	NY
WB Wood (NY2)	New York	NY

Dealer Company Name	City	State
Weeks Lerman	Maspeth	NY
Workplace Interiors	Fairport	NY
Workstation Consultants LLC	Albany	NY
Y Y Distributors	Monroe	NY
American Interiors	Cleveland	OH
American Interiors, Inc.	Toledo	OH
Business Furniture, LLC (Dayton)	Dayton	OH
Clair David Interiors	Toledo	OH
Commercial Works (OH1)	Columbus	OH
Commercial Works (OH3)	Cincinnati	OH
Corporate Interior Concepts	Columbus	OH
ELEMENTS IV INTERIORS	Dayton	OH
Friends Business Source (Findlay)	Findlay	OH
GWS FFE, LLC	West Chester	OH
Incognition, LLC. dba WeDoInstallation.com	Vandalia	OH
Indoff (OH15)	Youngstown	OH
Indoff (OH16)	Wilmington	OH
Indoff (OH17)	Lebanon	OH
Indoff (OH19)	Cleveland	OH
Indoff (OH5)	Hubbard	OH
Innovative Office Solutions, Inc. (OH)	Maria Stein	OH
King Business Interiors	Columbus	OH
Martin Public, LLC dba Kay-Twelve.com	Columbus	OH
My Office Design	Dayton	OH
OstermanCron Inc	Cincinnati	OH
RSFI Office Furniture	Worthington	OH
Temple Square Interiors	Akron	OH
The Bradley Company	Columbus	OH
The City Desk Company	Cleveland	OH
The RCF Group (OH1)	Cleveland	OH
The RCF Group (OH2)	West Chester	OH
Unisan LLC	Columbus	OH
W.B. Mason (OH)	Cleveland	OH
Wegman Company	Cincinnati	OH
Workscape, LLC (Cleveland)	Cleveland	OH
Indoff (OH18)	Wooster	OH
Furniture Marketing Group - Oklahoma	Oklahoma City	OK
Indoff (OK4)	Cleveland	OK
Interiors for Business	Oklahoma City	OK
Interiors for Business	Tulsa	OK
L & M Office Furniture	Tulsa	OK
Merrifield Office Supply	Enid	OK
Pinnacle Design Group, LLC	Norman	OK
Workspace Resource, Inc.	Tulsa	OK
Advanced Business Interiors (ONT1)	Ottawa	ON
AMJ Campbell Office Interiors	Mississauga	ON
atWork Office Interiors	Cambridge	ON
Blair's Atwork Office Furniture	Vaughan	ON
Brigholme Interiors Group	Markham	ON
Celia Roberts & Associates Inc.	Oakville	ON
CTI Working Environments	Mississauga	ON
Drechsel Business Interiors	Toronto	ON
Fluidconcepts	Mississauga	ON
IN2Space Interior Solutions	London	ON
POI Business Interiors	Markham	ON
Sensyst - The Business Interiors Group, Inc.	Mississauga	ON
Streamline Resource Group	London	ON
Wayne Berwick Office Furnishings	Kitchener	ON
Workplace Design Inc.	Ancaster	ON
ABCO Group	Toronto	ON
Alliance Interiors, Inc.	Jackson's Point	ON
Creative Office Designs (Ontario)	Newmarket	ON
Footprint Business Interiors	MISSISSAUGA	ON
Integral Business Interiors Inc.	Brampton	ON

Dealer Company Name	City	State
TCB Office Furniture and Supplies	Peterborough	ON
Towercor International	Mississauga	ON
Verticalspaces Inc	Toronto	ON
verto360	London	ON
Harris WorkSystems, Inc.	Tigard	OR
Indoff (OR1)	Creswell	OR
Interior Office Concepts	Medford	OR
NW Office Interiors	Milwaukie	OR
Office Interior Concepts	Portland	OR
Office Space Planners, Inc.	Portland	OR
Onesource Office Interiors, inc.	Portland	OR
PeopleSpace (Portland)	Portland	OR
Rose City Office Furnishings	Portland	OR
Total Office Interiors (OR)	Salem	OR
King Office Designs	Albany	OR
Richmark Enterprises, LLC	West Linn	OR
SK Consulting	Portland	OR
A. Pomerantz & Company	Philadelphia	PA
Advanced Office Environments, Inc.	Malvern	PA
Anderson Interiors	Verona	PA
Bauman Office Equipment Inc.	Beaver Falls	PA
Benjamin Roberts, LTD	Lancaster	PA
Burke & Michael, Inc.	Pittsburgh	PA
Commerce Office Furniture	Norristown	PA
Corporate Environments, A One Point Company	Bethlehem	PA
Delaney Brothers	Cranberry Township	PA
Easley & Rivers, Inc.	MONROEVILLE	PA
Educational Furniture Solutions	Norristown	PA
Ethosource, LLC	Morgantown	PA
Facility Works	Lemoyne	PA
Formcraft Interiors	Folcroft	PA
Indoff (PA3)	Pittsburgh	PA
Indoff (PA5)	Pittsburgh	PA
Indoff (PA9)	Harrisburg	PA
Kershner Office Furniture	King of Prussia	PA
McCartney's Inc.	Altoona	PA
Natural Office Furniture, LLC	Pittsburgh	PA
Nolt's Discount Office Furniture	Ephrata	PA
Office Environments, Inc. (PA)	Bristol	PA
Office Furniture Source	Feasterville	PA
Pulman Interiors	Scranton	PA
Sanner Office Supply	Erie	PA
Storage Concepts, Inc.	Ambler	PA
Supplysource, Inc. (PA1)	Williamsport	PA
Tanner Furniture	Harrisburg	PA
Target Office Products	Pittsburgh	PA
The Phillips Group	Harrisburg	PA
Today's Home Inc/TH Trade	Pittsburgh	PA
Today's Systems	Bala Cynwyd	PA
Top To Bottom Interiors, Inc	Altoona	PA
Total Office Interiors (PA)	Montgomeryville	PA
TransAmerican Office Furniture, Inc	Philadelphia	PA
Tri-State Office Furniture, Inc	McKees Rocks	PA
W.B. Mason (Erie)	Pittsburgh	PA
W.B. Mason (Oaks)	Phoenixville	PA
W.B. Mason (PA2)	Philadelphia	PA
W.B. Mason (PA3)	Allentown	PA
W.B. Mason (PA4)	York	PA
W.B. Mason (PA5)	North Versailles	PA
W.B. Mason (Pittsburgh/Export)	N. Versailles	PA
Westmoreland Telephone Company (WTC) dba/ Westmoreland Contract Furniture (W	Greensburg	PA
Workscape, Inc	Pittsburgh	PA
WorkSpace Solutions, Inc. (PA)	Pittsburgh	PA
Caribbean Office Design	Ponce	PR

Dealer Company Name	City	State
Contract Design Group, LLC	Hato Rey	PR
Distribuidora Blanco	Bayamon	PR
Innovative Office Solutions	Guaynabo	PR
Krone Contract Furniture	San Juan	PR
LF@Office Interiors	San Juan	PR
Multidesk	Aguada	PR
Office Design Solutions	Rio Grande	PR
Office Space Contractors	Caguas	PR
Systronics	Tres Monjitas Hato Rey	PR
Esteves Trading & Logistics Group, Inc. dba Office One	San Juan	PR
Ofi-Start	San Juan	PR
Bureau Extra Technique (B.E.T.) Inc	Lachine	QC
GROUPE AMEUBLEMENT FOCUS INC.	Boucherville	QC
Creative Office Environments (RI)	East Providence	RI
Office Direct	Warwick	RI
Office Furniture Solutions (RI)	Tiverton	RI
Pannello Systems	Portsmouth	RI
Sheehans	Portsmouth	RI
W.B. Mason Co., Inc. (Cranston)	Cranston	RI
American Pen & Panel, Inc.	Rock Hill	SC
Indoff (SC5)	Oak Island	SC
Indoff (SC7)	Lancaster	SC
Indoff (SC9)	Fair Play	SC
Marketplace Interiors, LLC	Mount PLeasant	SC
PMC Commercial Interiors (Greenville)	Greenville	SC
Wilcox Office Mart (Florence)	Florence	SC
Wilcox Office Mart of Charleston	N. Charleston	SC
Canfield Business Interiors	Sioux Falls	SD
Office Peeps Inc	Watertown	SD
HBI Office Plus	Regina	SK
Indoff (SC10)	Seneca	SC
Spaces Interior Design	North Sioux City	SD
A & W Office Supply & Design, Inc.	Knoxville	TN
A-Z Office Resource, Inc (TN1) - DBA West Business Interiors	Columbia	TN
Commercial Environments, Inc.	Knoxville	TN
COS Business Products & Interiors (Chatanooga)	Chattanooga	TN
GBI	Brenwoord	TN
Genesis Interiors	Sevierville	TN
Highbar Trading Co.	Memphis	TN
HiTouch Business Services (TN)	LaVergne	TN
HST Interior Elements	Nashville	TN
ID+A	Brentwood	TN
Indoff (TN2)	Tullahoma	TN
Indoff (TN7)	Jackson	TN
Indoff (TN8)	Columbia	TN
Inner Design Purchasing LLC	Brentwood	TN
Lucas Business Solutions, Inc.	Cordova	TN
Nashville Office Interiors - Nashville	Nashville	TN
Office Furniture & Related Services, Inc.	Nashville	TN
Office Furniture Concepts- Nashville	Nashville	TN
Office Images - Nashville	Nashville	TN
Office Resources, Inc. (ORI) - Nashville	Nashville	TN
Office Scapes, Inc (TN)	Bartlett	TN
OfficeWorks LLC	Knoxville	TN
Spaces Group	Cordova	TN
Synergy Business Environments - Nashville	Nashville	TN
WorkPlace Furniture	Memphis	TN
Workspace Interiors (TN)	Knoxville	TN
180 Office Solutions	Roundrock	TX
1st Class Solutions	Lubbock	TX
Bauhaus	Dallas	TX
Built For Dreams, Inc.	Lubbock	TX
Business Concepts LLC	Round Rock	TX
Business Interiors (TX)	Irving	TX

Dealer Company Name	City	State
Clark, Duncan & Morris, Inc.	Houston	TX
Coastal Office Solutions	Victoria	TX
Contract Associates of El Paso	El Paso	TX
Core Business Solutions	Pharr	TX
Corporate Outfitters, LTD	Houston	TX
Creative Office Furniture, Inc.	Houston	TX
Culture Based Interiors (Austin)	Austin	TX
Culture Based Interiors (San Antonio)	San Antonio	TX
DC Interiors - Rio Grande Valley	McAllen	TX
DC Interiors (TX)	San Antonio	TX
Debner + Company	Houston	TX
Embrace Office Interiors	Houston	TX
Facility Interiors, Inc.	Carrollton	TX
Furniture Marketing Group - Austin	Austin	TX
Furniture Marketing Group - Houston	Houston	TX
Furniture Marketing Group - Plano	Plano	TX
Furniture Solutions	Dallas	TX
HBI Office Solutions, Inc.	Huntsville	TX
III Office Resource Group	Carrollton	TX
Indoff (TX16)	Austin	TX
Indoff (TX24)	Fort Worth	TX
Indoff (TX26)	Houston	TX
Indoff (TX27)	Lewisville	TX
Indoff (TX29)	Tyler	TX
Indoff (TX30)	El Paso	TX
Indoff (TX31)	El Paso	TX
Indoff (TX32)	Fort Worth	TX
Indoff (TX33)	Lewisville	TX
Kay Davis Associates	Houston	TX
Lindsey Office Furniture	Houston	TX
Manning's	Beaumont	TX
Move Solutions	Dallas	TX
Office Boy Inc.	Dallas	TX
Office Furniture Concepts - Texas	Temple	TX
Office Furniture Connection (TX)	Houston	TX
Office Furniture Interiors, Inc.	San Antonio	TX
Office Furniture Source (TX)	Farmers Branch	TX
Office Interiors Group (OIG)	Grapevine	TX
Royer & Schutts	Ft Worth	TX
S.L.I. Design, Inc.	Houston	TX
SHELBY DISTRIBUTIONS Inc.	El Paso	TX
Spencer + Company	Dallas	TX
Systems Office Furniture, Inc.	College Station	TX
Tascosa Office Machines	Amarillo	TX
The Exceptional Home Center	McAllen	TX
The Luck Company	Houston	TX
The Wells Group, Inc.	Houston	TX
Turnkey Project Services	Fort Worth	TX
Vanguard Environments, Inc.	Houston	TX
Wilson Office Supply	Wichita Falls	TX
Wittigs Office Interiors (Corpus Christi)	Corpus Christi	TX
Wittigs Office Interiors (Houston)	Houston	TX
Wittigs Office Interiors (San Antonio II)	San Antonio	TX
Workscape Designs	Round Rock	TX
WorkSpace Resource (TX)	Conroe	TX
WRG, LLC dba Workplace Resource Group	Carrollton	TX
CCG, LLC	Salt Lake City	UT
Interior Solutions (UT)	Salt Lake City	UT
The Office Products	Salt Lake City	UT
Utah Office Solutions/Bluefin Design	Orem	UT
Amerisys	Chantilly	VA
Atrium Facilities & Interiors	Vienna	VA
Creative	Ashland	VA
DC Interiors (VA)	Casias	VA

Dealer Company Name	City	State
Design Business Furniture, Inc.	Woodbridge	VA
DK Workspaces, LLC	Richmond	VA
FurnitureSpeak, Inc.	Fairfax	VA
Indoff (VA7)	Richmond	VA
Indoff (VA8)	Portsmouth	VA
JMJ Corporation	Henrico	VA
Miller's Supplies at Work	Lorton	VA
Modern Environments	Virginia Beach	VA
MOI (VA2)	Richmond	VA
MOI (VA3)	Virginia Beach	VA
New Day Office Products and Furnishings	Suffolk	VA
NxVet, LLC	Woodridge	VA
Office Environments International	Arlington	VA
Pilato, Counts, and Arrington (PC & A)	Norfolk	VA
reDistrict	Alexandria	VA
SCS Integrated Support Solutions, LLC (VA)	Manassas	VA
Smith Contract	Fredericksburg	VA
Sumner Furniture	Sterling	VA
Tactical Office Solutions	Hampton	VA
Vision Business Products	Newington	VA
W.B. Mason (VA)	Winchester	VA
Washington Group Solutions	Falls Church	VA
Washington Workplace	Arlington	VA
Workplace Solutions, Inc.	Virginia Beach	VA
OSV Group Inc.	Fountain	VC
Office Armor (NOAH)	Virginia Beach	VA
Exterus Business Furniture	Shelburne	VT
Office Environments (VT)	South Burlington	VT
W.B. Mason (VT)	South Burlington	VT
W.B. Mason (VT2)	Lyndonville	VT
APEX Facility Resources Inc.	Kent	WA
BAM Office Interiors	Vancouver	WA
BRAG Investments Inc dba Saxton Bradley	Kent	WA
Brutzman's Office Solutions	Richland	WA
Complete Office (WA)	Seattle	WA
Contract Resource Group, Inc (WA)	Spokane	WA
Davis Furniture & Equipment inc.	Spokane	WA
Ducky's Office Furniture	Seattle	WA
Global Commercial Furnishings, Inc.	Spokane	WA
Great Spaces	Coeur d' Alene	WA
HLW Workspace Solutions inc	Gig Harbor	WA
Indoff (WA3)	Tacoma	WA
Indoff (WA4)	Bonney	WA
Integrity Interior Solutions, LLC	Kent	WA
Keeney's Office Supply	Redmond	WA
Legacy Group	Renton	WA
MRG dba Workpointe	Seattle	WA
Northwest Modular Systems Furniture	Tukwila	WA
Open Plan LLC	Leavenworth	WA
OpenSquare	Seattle	WA
Peoplespace (WA)	Seattle	WA
Re-Juiced Studio LLC	Edmonds	WA
RW Sales Office Furniture	Vancouver	WA
Sound Office Solutions	Kirkland	WA
The Creative Office	Olympia	WA
Total Office Concepts, Inc (WA)	Walla Walla	WA
Trico Office Interiors	Bellingham	WA
Working Spaces Pacific, Inc. (WA)	Kirkland	WA
Omega Commercial Interiors	Morgantown	WV
Affordable Office Interiors - Madison	Madison	WI
Brothers Business Interiors	Milwaukee	WI
CJ & Associates, Inc.	New Berlin	WI
Indoff (WI4)	Onalaska	WI
M & M Office Interiors - Middleton	Middleton	WI

Dealer Company Name	City	State
M & M Office Interiors, Inc.	Pewaukee	WI
Nordon Business Environments	Appleton	WI
Office Enterprises, Inc.	Weston	WI
RCS Commercial Interiors	Milwaukee	WI
School Specialty (TX)	Greenville	WI
Schroeder Solutions	New Berlin	WI
Spin Business Group	Wausau	WI
Capitol Business Interiors (WV1)	Charleston	WV
Indoff (WV1)	Wheeling	WV
Indoff (WY4)	Cheyenne	WY
Wyoming Office Products & Interiors	Casper	WY

AIS

OMNIA Partners, Public Sector

Contract # R191801

Effective 05/01/2020 – 04/30/2025

Last Updated: 11/08/2023

Based on Current Commercial Price Lists

Entire AIS Product Offering is available on OMNIA

Systems, Casegoods, Tables, Universal & Specials

(All finish grades)

Discounting for Matrix, Divi, MWall, A02, Universal, Oxygen, Aloft, PowerBeam, PowerBench, Calibrate Community, Calibrate Series, Tables and Specials

List Price of Order	OMNIA Member Discount
$1-$45,000**	74%
$45,001-$110,000	79%
$110,001-$325,000	81%
$325,001 +	Negotiable
Steel Storage Cabinets & Bookcases (S-CAB and S-BC model #'s only) $1 +	65%

***All orders under $17,500 list will have a 15% of net freight charge.*

Discounts do not include delivery and installation.

Discounting is for all finish grades.

All AIS Specials and any custom product within these product categories are available on contract.

DIVI FAST TRACK

Discounting for Divi Fast Track

List Price of Order	OMNIA Member Discount
$17,500-$45,000***	76%
$45,001-$110,000	81%
$110,001-$325,000	82%
$325,001 +	Negotiable

****Orders less than $6,000 net will have a small order charge of $100 per order.*

Divi Fast Track items cannot be combined with non-Divi Fast Track items for deeper discounting.

Discounts do not include delivery and installation.

Must use all Divi Fast Track finish options and qualifying products.

Must be complete workstations. To qualify, full workstations must consist of panels, worksurfaces and storage (upper and/or lower storage).

Seating

Discounting for Seating including Divi Fast Track Seating (freight included)

List Price of Order	OMNIA Member Discount
$1 +	57%

Discount does not include delivery and installation.

Seating cannot be combined with Systems, Casegoods, Tables, Universal & Specials category for deeper discounting.

Services

Service	OMNIA Member Rate (not to exceed)
Design	$65/hour
Project Management	$85/hour
Installation	Negotiable

Approved Price Lists: Current Commercial Price Lists.

Freight & Delivery:

• All orders under $17,500 list will have a 15% of net freight charge. *Does not apply to seating.*

Any questions, email omniapartners@ais-inc.com









OMNIA PARTNERS PROGRAM

AIS and OMNIA Partners work closely together to make ordering furniture simple and easy. AIS provides quality office and contract furnishings produced at our headquarters in Leominster, MA. Our diverse cross section of products are perfect for office, educational, and institutional use. Whether you're looking for tables, seating, storage, or desking solutions, we have what you need. And, if you happen to be looking for them quickly, we can do that too. Best of all, it won't break the bank.

OMNIA Partners is the purchasing organization that provides immense purchasing power and industry-leading suppliers to public sector, educational, and non-profit organizations. With no cost to participate and no minimum order requirements, organizations of any size have the ability to purchase the products, services and solutions they need at volume discount prices that would be nearly impossible to attain individually. No project is too small to reap the benefits of this competitively solicited contract. To learn more visit: To learn more, visit: OMNIA Partners & AIS Overview.

Save Time + Money With A Competitively Sourced Cooperative Contract

AIS & OMNIA Partners
Lead Agency: Region 4 ESC-TX
Contract Number: R191801
Last updated: 11/2023

OMNIA® PARTNERS AIS

FURNITURE FOR PRIVATE OFFICES OR MEETING SPACES

Calibrate® Series has you covered—case closed. This collection of high-quality laminate casegoods and conferencing solutions looks great and performs well year after year. You'll appreciate the many finish choices, hardware options and styles to choose from.



Calibrate Private Office with Height Adjustable Cantilevered Return and L Shelves. Shown with Devens Task and Side Chair.



Calibrate Private Office with Height Adjustable Table in Bookcase Base. Shown with Auburn Chair and Grafton Side Chair.



Calibrate Conferencing Table with Boat Top, Three Bases and Incorporated Power and Data. Shown with Devens Task Seating.



Calibrate End Panel Table at Standing Height with Pierce Stools.

A RANGE OF WORKSTATIONS TO SUPPORT YOUR TEAMS

Open Plan

Open landscape offices continue to resonate. And we've got the right products to fill 'em—like Divi® and Matrix®. These panel-based systems offer high panels for privacy and low panels that keep employees close to the action. For benching, we designed Day-to-Day® PowerBeam and PowerBench—two proven desking solutions for the open plan. With a variety of storage and screen options, we've got the open plan solutions to help define space and support individual needs.



Divi Linear with Channel Mounted Screens, Devens Task Chair and Mobile Pedestal Storage.



Day-to-Day PowerBeam and Height Adjustable Tables with Slimline Screens.



Matrix with Quarter Glass Panels, Tri-Wheel Laminate Mobile Whiteboard to divide stations, and Calibrate Storage.



Day-to-Day PowerBench with Slimline Screens and Suspended Caddy.

YOU'LL APPRECIATE EVERTHING THAT'S POSSIBLE WITH AIS

AIS Training Rooms

Flip top, height adjustable and powered table options create flexible, interactive and effective training rooms. Choose from a variety of seating to support users' comfort and wellbeing.





AIS Lounge Spaces

Individual, small team, or collaborative meeting spaces provide comfort, relaxation and dedicated focus time.






AIS Café Spaces

Create engaging and flexible spaces with the level of technology support you need.






STORE YOUR STUFF, PULL UP A CHAIR, AND TAKE A SEAT AT ONE OF OUR TABLES

Storage

AIS' extensive statement of line - including lateral files, bookcases, wardrobes, suspended storage, pull-out pantry towers, personal storage, and lockers - will solve any storage need. With robust construction, tight tolerances, precision ball bearings and heavy weight shelf supports, AIS Storage will perform year after year.



Seating

When your team needs a place to sit, AIS has you covered with high-performing seating for workspaces, cafés and lounges, collaborative areas, training and conference rooms, and everywhere else. And when they need it fast, new seating can be on its way in a few days with the AIS Express Seating program.



Tables

From Monday meetings to Friday deadlines, AIS Tables deliver choice, value, and flexibility you can count on. Formal, informal, training, collaborative, café, height-adjustable, occasional — whatever you need.



CONTRACT & CONTACT INFORMATION

OMNIA Partners
Furniture, Installation and Related Services
Region 4 ESC-TX
Contract Number: R191801
May 1, 2020 to April 30, 2025

OMNIA Partners national cooperative contract has been competitively solicited and publicly awarded by Region 4 Education Service Center and can be viewed here.

Find an AIS Rep near you
omniapartners@ais-inc.com or call 800.434.7400

Systems, Casegoods, Tables, Universal, Accessories & All Screens

Discounting for all finish grades

List Price of Order	OMNIA Participant Discount
$1-$45,000	74%
$45,001-$110,000	79%
$110,001-$325,000	81%
$325,001 +	Negotiable
Steel Storage Cabinets and Bookcases (S-CAB and S-BC model #'s only)	
$1 +	65%

For orders under $17,500 list, a small freight fee applies.

Divi Fast Track

Discounting for Divi Fast Track

List Price of Order	OMNIA Participant Discount
$17,500 -$45,000	76%
$45,001-$110,000	81%
$110,001 -$325,000	82%
$325,001 +	Negotiable

Divi Fast Track items cannot be combined with non-Divi Fast Track items for additional discounting.

Seating

Discounting for Standard, Express, and Divi Fastrack Programs

List Price of Order	OMNIA Participant Discount
$1+	57%

Seating cannot be combined with Systems, Casegoods, Tables, Universal, and Specials category for deeper discounting.

Please contact your AIS representative to verify current pricing, fees, delivery, and installation.

ORDERING INFORMATION

How to Place an OMNIA Partners Order with AIS

1. **CONTACT** Contact an Authorized AIS Dealer.
2. **REQUEST QUOTE** Our authorized AIS Dealer will provide a detailed quote and instructions for placing your order.
3. **SEND P.O.** Send your completed P.O. directly to our authorized AIS Dealer.
4. **P.O. REVIEW** Our Authorized AIS dealer will review your order for accuracy and discuss current leadtimes, delivery and installation.
5. **SUBMIT ORDER** Our AIS Authorized Dealer will submit your order to AIS and will coordinate and communicate details on the shipment and delivery of your products.

What to include on your purchase order:

- AIS Contract number: R191801.
- PO's may be issued to the authorized dealer or directly to AIS, c/o the dealer.
- Complete shipping information and contact details.

Please contact your AIS representative to verify current pricing, fees, delivery, and installation.



Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SPECIAL EXCEPTION REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING IN THE SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT (R-1), ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIOS 08-2122-018-0200; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Applicant, DMG Investment Trust, LLC desires to construct a two-unit twin home building that will provide two three-bedroom units and appropriate parking spaces and landscaping on the single-family zoned parcel identified by folio 08-2122-018-0200; and

WHEREAS, in accordance with the City of Opa-Locka's Land Development Regulations ("City LDR"), Ordinance 15-31, Section 22-79 requires special exception review approval to permit the construction of a twin home on property zoned single-family; and

WHEREAS, the Applicant, has submitted a request for special exception review and provided documentation to meet the approval criteria as required by City LDR Section 22-60(B) to construct a two-unit twin home building in the Single-Family Residential Zoning District (R-1); and

WHEREAS, Planning & Community Development staff for the City of Opa-Locka has reviewed the application of DMG Investment Trust, LLC and has determined that the applicant has provided all information required by Section 22-55(I) of the City of Opa-Locka's Land Development Code for proper consideration by the City Commission; and

WHEREAS, the Planning and Zoning Board reviewed this request at a public hearing on December 12, 2023 and recommended approval of this request for special exception review by a 5—0 vote as the site plan is provided herein as Exhibit "A".

WHEREAS, the City Commission of the City of Opa-Locka finds that it is in the best interest of the City and its residents to approve the special exception request as provided herein.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AS FOLLOWS:

SECTION 1. RECITALS.
The above recitals are true and correct and are incorporated into this Resolution by reference.

SECTION 2. APPROVAL/DENIAL.
Approval/Denial of Special Exception Review. The City Commission of the City of Opa-Locka, Florida hereby approves / denies the request for the Special Exception for the Construction of a two three-bedroom units and appropriate parking spaces and landscaping in accordance with the City of Opa-Locka's Land Development Regulations on the property located at the corner of NW 17th Avenue and Opa Locka Boulevard and identified by folio 08-2122-018-0200, in the R-1 Zoning District, as set forth in Exhibit "A" attached to herein.

Section 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the Interim City Manager following review by the City Attorney, without the need of a public hearing by filing a corrected copy of same with the City Clerk.

Section 4. EFFECTIVE DATE.
This Resolution shall, upon adoption, become effective as specified by the City of Opa-Locka's Code of Ordinances, Land Development Regulations and the City of Opa-Locka Charter**.**

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-locka
Agenda Cover Memo

Department Director:	Gregory D. Gay			**Department Director Signature:**		
City Manager:	Darvin Williams			**CM Signature**		
Commission Meeting Date:	January 10, 2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**
				X		
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**	**2nd Reading**
					X	
		X	**Public Hearing:** *(Enter X in box)*		**Yes** / **No**	**Yes** / **No**
					X	
Funding Source: *Account#* : **N/A**	*(Enter Fund & Dept)* Ex: See Financial Impact section below		**Advertising Requirement:** *(Enter X in box)*		**Yes**	**No**
					X	
ILA Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:** N/A			
		X				
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ■ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*	
	X					
Sponsor Name	Darvin Williams		**Department: Planning & Community Development**		City Manager	

Short Title:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, TO APPROVE OR DENY THE SPECIAL EXCEPTION REVIEW REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIOS 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

Staff Summary:

The applicant, DMG Investment Trust, LLC desires to construct a two unit twin home building that will provide two three-bedroom units and appropriate parking spaces and landscaping on the single-family (R-1) zoned parcel identified by folio 08-2122-018-0200. In accordance with the City of Opa-Locka's Land Development Regulations ("City LDR"), Ordinance 15-31, Section 22-79 requires special exception review approval to permit the construction of a twin home on property zoned single-family. The Applicant, has submitted a request for special exception review and provided documentation to meet the approval criteria as required by City LDR Section 22-60, B, 1-12 to construct a two unit twin home building in the Single Family Residential

Zoning District (R-1). The Planning & Community Development staff has reviewed the application of DMG Investment Trust, LLC and has determined that the applicant has provided all information required by Section 22-55(I) of the City of Opa-Locka's Land Development Code for proper consideration by the Planning and Zoning Board and has reviewed this request at a public hearing on December 12, 2023 and recommended approval of this request for special exception review by a 5—0 vote with a copy of the site plan is provided herein as Exhibit "A".

Financial Impact

Approval of the Twin Home Special Exception Review will not provide any negative financial impact.

Proposed Action:

Staff recommended approval of this Resolution.

Attachment:

Draft Resolution
PZAB SE Application
Site Plan
Survey
Landscaping
Staff Report- Twin Home Special Exception Review

These blenders might cut you or burn your things. About 4.8 million have been recalled

BY DAVID J. NEAL
dneal@miamiherald.com

A blender should cut fruit, not your skin. Nor should it burn your possessions. So, BlendJet recalled about 4.9 million BlendJet 2 Portable Blenders sold in the United States and Canada.

"The recalled blenders can overheat or catch fire and the blender blades can break off, posing fire and laceration hazards to consumers," the U.S. Consumer Product Commission recall notice states.

That's not an idle concern. The recall notice says BlendJet knows about 329 times the blades broke; 49 times people got burned; one person who got sliced; 17 times the blenders overheated or started fires, causing $150,000 of property damage.



U.S. Consumer Product Safety Commission

BlendJet 2 Portable Blenders have been recalled.

BlendJet wants customers with the blenders, which were sold from October 2020 through this November, to reach out to the company for a free replacement of the base. Do this by cutting the rubber seal on the base into three or more pieces, shoot a photo with the pieces and the serial number on the base and email it to safety@blendjet.com or upload it to the recall website.

To see if this recall concerns your blender, you can go to BlendJet's site and enter your blender's serial number.

For other questions, either go to the recall website hyperlinked above or call BlendJet Monday through Friday, 8 a.m. to 10 p.m., Eastern time at 844-334-0562.

David J. Neal: 305-376-3559, @DavidJNeal

Miami Gardens, Palm Beach restaurant problems include rodents and flies

BY DAVID J. NEAL
dneal@miamiherald.com

A Miami Gardens and Rivera Beach restaurant were part of this week's Sick and Shut Down List of Miami-Dade and Palm Beach restaurants that failed inspection.

Once again, we remind you, we don't do the inspecting, and we don't choose who gets inspected. Direct your complaints to the Florida Department of Business and Professional Regulation.

In alphabetical order:

Caribbean Kitchen 305, 760 NW 183rd St., Miami Gardens: Routine inspection, 20 total violations, six High Priority violations.

We told you about this place with its hot water deficiencies — which means washing and cleaning deficiencies —and rodent problems earlier this week.

The kitchen was open again after it corrected the issue for the next day's re-inspection.

Mulligan's Beach House Singer Island, 2551 N. Ocean Ave., Riviera Beach: Complaint inspection, six total violations, five High Priority violations.

Eight flies at the inside bar were "flying around, landing on liquor bottles and the wall behind" the bar. Rodents left 34 droppings on the kitchen floor.

Mulligan's passed a second re-inspection two days after the original inspection.

CITY OF OPA-LOCKA, FLORIDA
NOTICE TO THE PUBLIC

NOTICE IS HEREBY GIVEN that the City Commission of the City of Opa-locka, Florida will hold public hearings at the Regular Commission Meeting on **Wednesday, January 10, 2024 at 7:00 p.m.,** in the City Commission Chambers at the Opa-locka Municipal Complex, 780 Fisherman Street, 3rd Floor, Opa-locka, Florida, to consider the following items for final adoption:

FIRST READING / PUBLIC HEARINGS:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

SECOND READING / PUBLIC HEARING:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, ENTITLED "OFF-STREET PARKING AND LOADING REQUIREMENTS" TO SPECIFICALLY AMEND SECTION 2-152(F) ENTITLED "GENERAL PRINCIPLES" TO PROVIDE FOR OUTDOOR STORAGE OF VEHICLES ONLY IN A DESIGNATED PARKING SPACE, PROHIBITING DOUBLE PARKING AND REQUIRING THAT ALL AREAS ARE FREE FROM UNSIGHTLY CONDITIONS; AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, SPECIFICALLY SECTION 2-160 (C)(4) ENTITLED "PERMITTED OFF-STREET PARKING" TO REQUIRE A CURRENT VALID LICENSE PLATE FOR RESIDENTIAL PARKING AND FURTHER REQUIRING THAT VEHICLES PARKED AS COMMERCIAL AND INDUSTRIAL FACILITIES HAVE A VALID LICENSE PLATE AND OR BILL OF SALE AND WORK ORDER POSTED VISIBLY ON THE DRIVER'S SIDE WINDOW, INCLUDING VIN NUMBER FOR VEHICLE, BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION IN CODE; PROVIDING FOR AN EFFECTIVE DATE.-

RESOLUTIONS / PUBLIC HEARINGS:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SPECIAL EXCEPTION REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING IN THE SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT (R-1), ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200; PROVIDING FOR AN EFFECTIVE DATE.

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE FINAL SITE PLAN FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

All interested persons are encouraged to participate and will be heard with respect to the public hearings.

Additional information on the above item may be obtained by contacting the Office of the City Clerk by telephone 305-953-2800 or email jflores@opalockafl.gov. To participate or provide comments virtually, please register on the City of Opa-locka website at www.opalockafl.gov no later than 7:00 p.m. on Wednesday, January 10, 2024.

In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodations to participate in the proceeding should contact the Office of the City Clerk at (305) 953-2800 for assistance not later than five (5) days prior to the proceeding. If hearing impaired, you may telephone the Florida Relay Service at (800) 955-8771 (TTY), (800) 955-8770 (Voice), (877) 955-8773 (Spanish) or (877) 955-8707 (Creole).

PURSUANT TO FS 286.0105: *Anyone who desires to appeal any decision made by any board, agency, or commission with respect to any matter considered at such meeting or hearing will need a record of the proceedings, and for that reason, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal may be based.*

Joanna Flores, CMC
City Clerk
City of Opa-locka

+ SITE INFORMATION

OWNER	DMG INVESTMENT TRUST LLC
FOLIO NUMBER	08-2122-018-0200
LOT AREA	10,575 Sq.Ft
ADDRESS	13600 NW 17 AVE.
LEGAL DESCRIPTION	PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 PORT LOTS 39 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

+ LOCATION



+ ZONING DATA:

ZONING: R-1

LOT SIZE	10,575 Sq.Ft		
	REQUIRED	EXISTING	PROPOSED
LOT COVERAGE	35%	-----	2.252 Sq / 22%
SETBACKS			
	REQUIRED	EXISTING	PROPOSED
FRONT	25 Ft.	25 Ft.	25 Ft.
INTERIOR SIDE	7.5 Ft.	---------	23'-0 Ft.
SIDE FACING STREET	15 Ft.	---------	25'-0" Ft.
REAR	25 Ft.	---------	30'-1" Ft.

+ SITE INVESTIGATION NOTE

EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF WORK THE BIDDER IS REQUIRED, BEFORE SUBMITTING HIS PROPOSAL, TO VISIT THE SITE OF THE PROPOSED WORK AND FAMILIARIZE HIM OR HERSELF WITH THE NATURE AND EXTENT OF THE WORK AND ANY LOCAL CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND EQUIPMENT, MATERIALS AND LABOR REQUIRED THEREFORE. SINCE THE WORK INVOLVES NEW AND/OR EXISTING BUILDINGS, SYSTEMS AND FACILITIES, SPECIAL CONSIDERATION SHALL BE GIVEN TO EXAMINATION OF WORKING CONDITIONS. NEW FACILITIES AND ALL BUILDING STRUCTURES FAMILIARIZE TO HIMSELF WITH ALL EXISTING CONDITIONS. SLIGHT VARIATION OF ROUTING AND OR CONSTRUCTIONS SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES. THESE VARIATIONS ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHENEVER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITY ASSUMED UNDER THIS CONTRACT.

+ ALTERATION PROJECT PROCEDURES

REQUIREMENTS INCLUDED:

COORDINATE WORK OF TRADES AND SCHEDULE ELEMENTS OF ALTERATIONS AND RENOVATION WORK BY PROCEDURES AND METHODS TO EXPEDITE COMPLETION OF THE WORK.

CUT, MOVE OR REMOVE ITEMS AS NECESSARY TO PROVIDE ACCESS OR TO ALLOW ALTERATIONS AND NEW WORK TO PROCEED. INCLUDE SUCH ITEM AS:

a. REPAIR OR REMOVAL OF HAZARDOUS OR UNSANITY CONDITIONS.

b. REMOVAL OF ABANDONED ITEMS AND ITEMS SERVING NO USEFUL PURPOSE, SUCH AS ABANDONED PIPING, CONDUIT, AND WIRING.

c. REMOVAL OF UNSUITABLE OR EXTRAGENEOUS MATERIALS NOT MARKED FOR SALVAGE, SUCH AS ABANDONED EQUIPMENT AND DEBRIS INCLUDING ROTTED WOOD, RUSTED METALS AND DETERIORATED CONCRETE.

ALTERATIONS AND CONNECTIONS OF NEW CONTRUCTION TO EXISTING CONSTRUCTION OCCUR AT DUST SENSITIVE AREAS. EXECUTE ALL MEASURES TO COMPLETELY CONTROL AND SEPARATE DUST FROM EXISTING AREA AND EQUIPMENT.

+ TERMITE PROTECTION

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRABEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES "

+ GENERAL SCOPE OF WORK

WORK ENCOMPASSED UNDER THIS SET OF CONTRACT DOCUMENTS INCLUDES THE CONSTRUCTION OF THE NEW ONE STORY RESIDENTIAL HOUSE.

+ NEW CONSTRUCTION:

- GROUND FLOOR:_____1,300,00 Sq.Ft.

+ NOTE

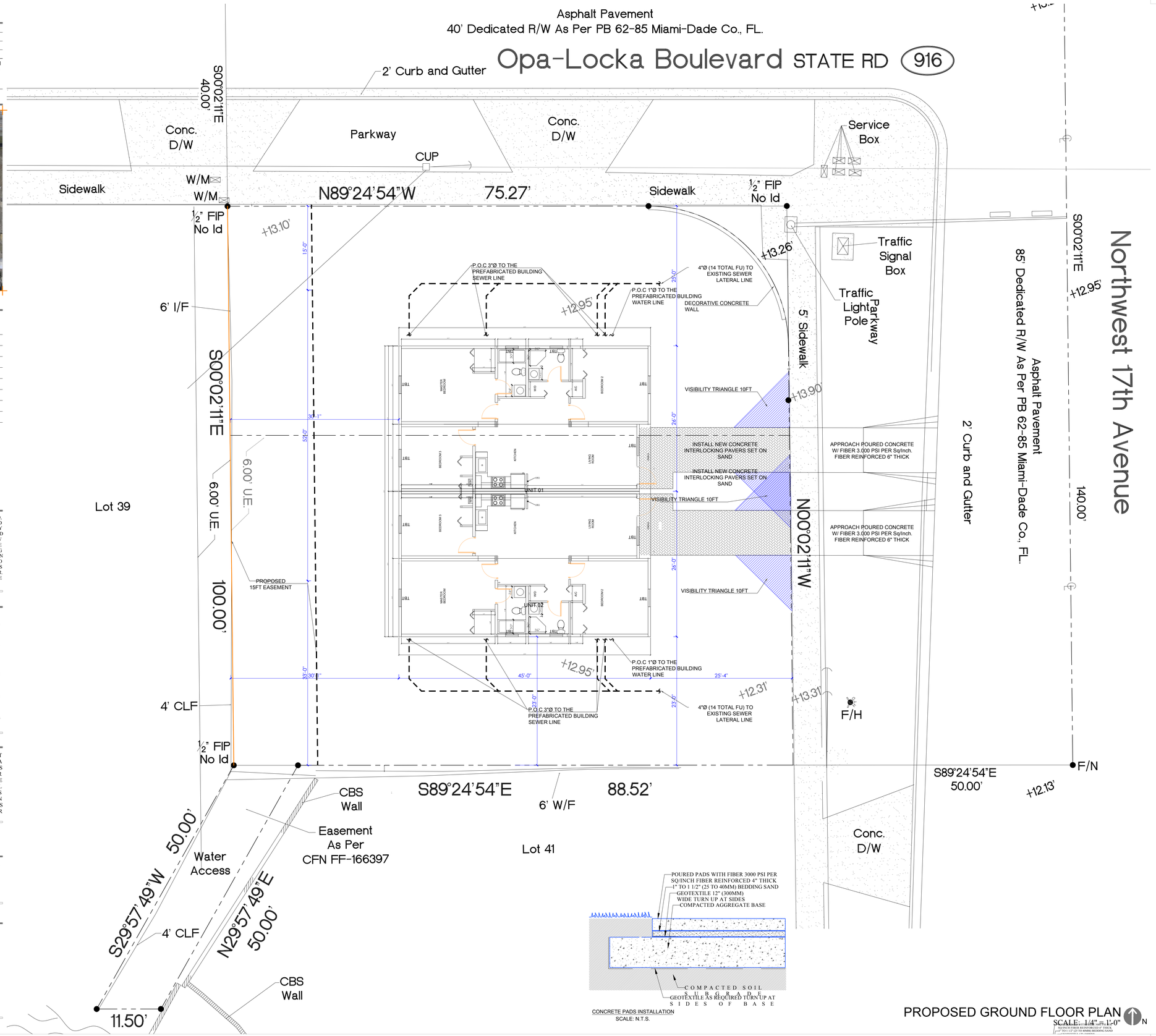
CONSTRUCTION DRAWINGS ARE DIAFRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF THE PROJECT.

CONTRACTOR TO PROVIDE ALL THE COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING PROJECT, EVEN IF NOT INCLUDED IN THE CONSTRUCTION DOCUMENTS.

ALTHOUGH IT IS UNDERSTOOD THAT THE CONTRACTOR IS NOT A LICENSED DESIGN PROFESSIONAL, THE CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND LOCATIONS OF SYSTEMS WITH ARCHITECTURE AND ALL DISCIPLINES INCLUDED IN THESE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR AGREES TO PROMPTLY ADVISE THE ARCHITECT OF ANY NONCONFORMITY OBSERVED BY, OR MADE KNOWN TO, THE CONTRACTOR.

REFER TO "CONSTRUCTION NOTES" ON SHEET A0.02 FOR FURTHER INSTRUCTIONS.



CONCRETE PADS INSTALLATION
SCALE: N.T.S.

PROPOSED GROUND FLOOR PLAN
SCALE: 1/4" = 1'-0"

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nandezD+D
design+development

PROJECT

13600 NW 17 AVE

OWNER

DMG INVESTMENT TRUST LLC

ARCHITECT

NANDEZ Design+Development
2223 SW 13Th AVE
MIAMI, FL 33145
tel:786.703.7704
info@nandezdd.com
AA 26002732
IB 26001520

ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

SEAL

REWORKS

1 2 3 4 5 7 8

REVISIONS

1 2 3 4 5 7 8

INFORMATION

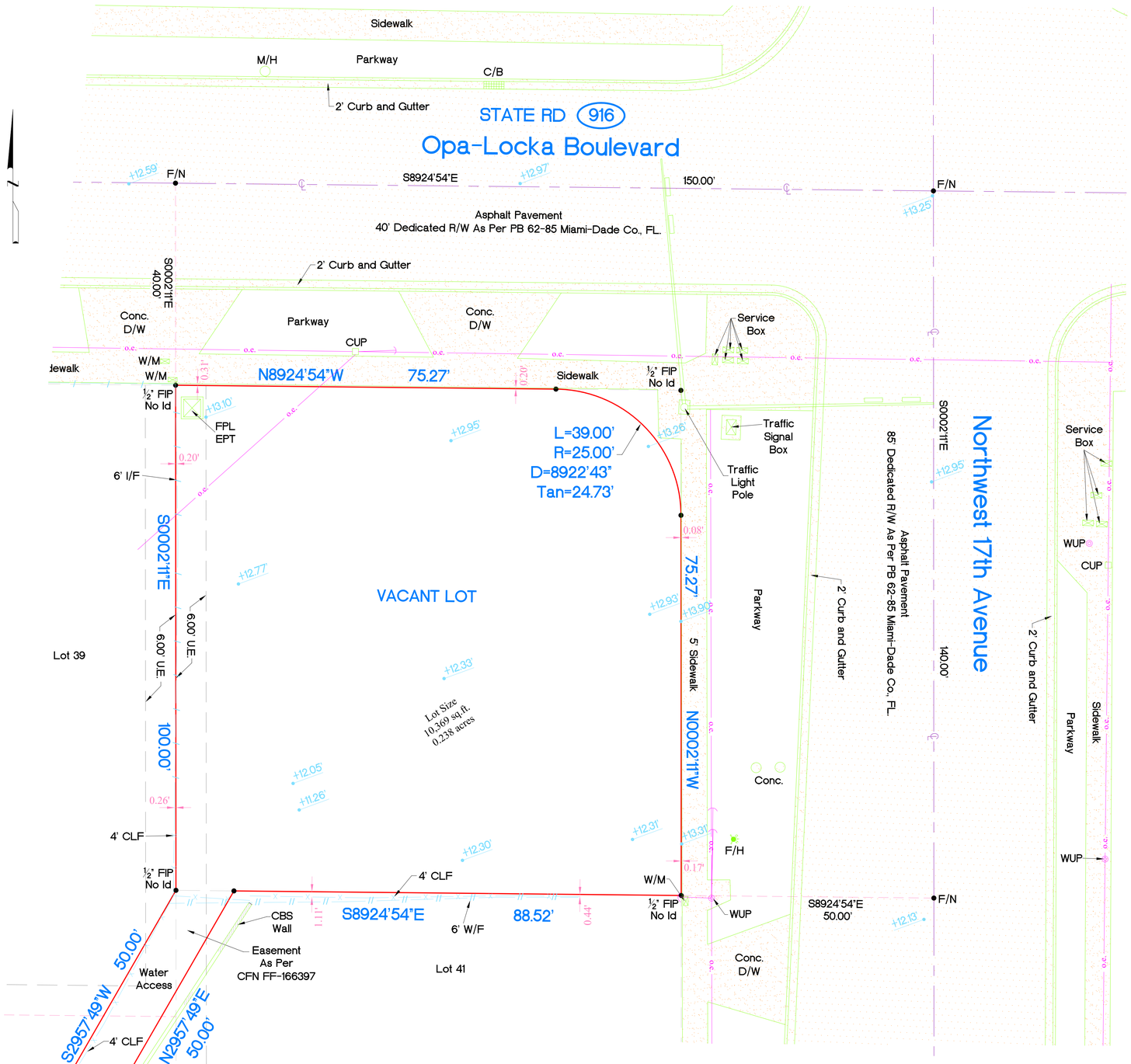
PROPOSED SITE PLAN

DATE: 10/11/2021
Scale: AS SHOWN
Job No.: 2021/
Drawn by: RP
Checked by: RP Jr.

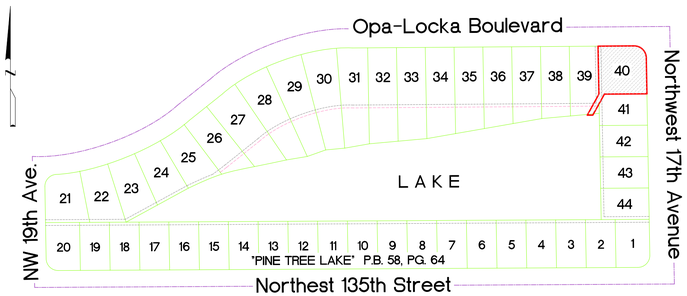
Sheet
A101

Boundary Survey

Graphic Scale 1" = 10'



Location Sketch N.T.S.



AFA & Company, Inc. Land Surveyors

Prepared By:
AFA & COMPANY, INC.
PROFESSIONAL LAND SURVEYORS AND MAPPERS
FLORIDA CERTIFICATE OF AUTHORIZATION No. LB 7498
13050 SW 133RD COURT,
MIAMI, FLORIDA 33186
E-MAIL: AFACO@BELLSOUTH.NET
PH: 305-234-0588

Abbreviations of Legend

AVE.	=AVENUE
ASPH	=ASPHALT
A/W	=ANCHORD WIRE
A/C	=AIR CONDITIONER
BLDG	=BUILDING
B. COR.	=BLOCK CORNER
CAL	= CALCULATED
C.B.	=CATCH BASIN
CLF	=CHAIN LINK FENCE
CONC.	=CONCRETE
COL.	=COLUMN
C.U.P.	=CONCRETE UTILITY POLE
C.L.P.	=CONCRETE LIGHT POLE
CBS	=CONCRETE BLOCK STRUCTURE
C.M.E.	=CANAL MAINTENANCE EASEMENT
D	=DELTA
D/W	=DRIVEWAY
D.M.E.	=DRAINAGE & MAINTENANCE EASEMENT
ENC.	=ENCROACHMENT
E.T.P.	=ELECTRIC TRANSFORMER PAD
F.P.L.	=FLORIDA POWER AND LIGHT
F.H.	=FIRE HYDRANT
F.I.P.	=FOUND IRON PIPE
F.F.	=FINISH FLOOR
DH/F	=FOUND DRILL HOLE
F.R.	=FOUND REBAR
F/D	=FOUND DISC
F/N	=FOUND NAIL
I/F	=IRON FENCE
L	=LENGHT
L.M.E.	=LAKE MAINTENANCE EASEMENT
L.F.E.	=LOWEST FLOOR ELEVATION
L.P.	=LIGHT POLE
MEAS.	=MEASURED
M.H.	=MAN HOLE
M.L.	=MONUMENT LINE
N.G.V.D.	=NATIONAL GEODETIC VERTICAL DATUM
N.T.S.	=NOT TO SCALE
O.E.	=OVERHEAD ELECTRIC LINE
O.L.	=ON LINE
P.C.P.	=PERMANENT CONTROL POINT
P.M.	=PARKING METER
P.C.	=POINT OF CURVATURE
P/W	=PARKWAY
PL.	=PLANTER
P.O.C	=POINT OF COMMENCEMENT
P.O.B	=POINT OF BEGINNING
R	=RADIUS
RES	=RESIDENCE
R/W	=RIGHT OF WAY
S.D.H.	=SET DRILL HOLE
S/N	=SET NAIL
S.I.P.	=SET IRON PIPE
SDWLK	=SIDEWALK
ST	=STREET
T	=TANGENT
U.E.	=UTILITY EASEMENT
W/F	=WOOD FENCE
W.V.	=WATER VALVE
W.U.P.	=WOOD UTILITY POLE
——o——o——	=WOOD FENCE
——x——x——	=IRON FENCE
	=CBS WALL
——+——+——	=CHAIN LINK FENCE
	=OVERHEAD ELEC
	=CENTER LINE
	=EASEMENT
x.x.00'	=DENOTES ELEVATIONS
	=BUILDING
	=DISTANCE
	=CATCH BASIN
	=WATER METER
	=W.U.P.
	=STATE ROAD
	=US HIGHWAY
	=INTERSTATE
	=MONITORY WELL

LEGAL DESCRIPTION:

Lot 40 and the following described portion of Lots 39 and 41; Commence at the Northwest corner of Lot 40; thence run S00°02'11"E, along the West line of Lot 40, for 100 feet to the Southwest corner of Lot 40 and the Point of Beginning of the parcel of land hereinafter to be described; thence run S29°57'49"W for 50 feet, more or less to the shoreline of a lake; thence run Easterly along said shoreline for 11.5 feet more or less; thence run N29°57'49"E for 50 feet more or less to a point on the South line of Lot 40; thence run N89°24'54"W, along the South line of Lot 40 for 11.48 feet to the Point of Beginning, all lying in "FIRST ADDITION TO PINE TREE LAKE", according to the Plat Thereof as Recorded in Plat Book 62, Page 85, of the Public Records of Miami-Dade County, Florida.

CERTIFIED ONLY TO:

DMG Investment Trust LLC

PROPERTY ADDRESS:

13600 Northwest 17th Avenue
Opa-Locka Florida 3354

ELEVATION INFORMATION
National Flood Insurance Program
FEMA Elev. Reference to NGVD 1929

Comm Panel	120650
Panel #	0314
Firm Zone:	"X"
Date of Firm:	09-11-2009
Base Flood Elev.	N/A
F.Floor Elev.	N/A
Garage Elev.	N/A
Suffix:	"L"

Elev. Reference to NGVD 1929

JOB #	23-1128
DATE	09-21-2023
PB	62-85

Surveyors Notes:

#1 Land Shown Hereon were not abstracted for Easement and /or Right of Way Records. The Easement / Right of Way Show on Survey are as per plat of record unless otherewise noted.
#2 Benchmark: Miami-Dade County Public Works Dep. BM #ID: 692; Name: PN078; Elev. +13.14'
#3 Bearings as Shown hereon are Based upon Opa-Locka Boulevard, S89°24'54"E
#4 Please See Abbreviations
#5 Drawn By: A. Torres
#6 Date: 9-21-2023
#7 Completed Survey Field Date: 9-21-2023
#8 Disc No. 2023, Station Surveying Scion
#9 Last Revised:
#10 Zoned Building setback line not determined

Surveyor's Notes:

#11 The herein captioned Property was surveyed and described based on the Legal Description Provided by Client.
#12 This Certification is Only for the lands as Described, it is not a certification of Title, Zoning, Easements, or Freedom of encumbrances. ABSTRACT NOT REVIEWED.
#13 There may be additional Restrictions not Shown on this survey that may be found in the Public Records of Said County Examination of ABSTRACT OF TITLE will have to be made to determine recorded instruments, if any affecting this property.
#14 Accuracy: The expected use of land, as classified in the Standards of Practice (5J-17.052), is residential. The minimum relative distance accuracy for this type of boundary survey is 1.0 foot in 10,000.00' feet. the accuracy obtained by measurement and calculation of a closed geometric figure was found to exceed this requirement.
#15 Foundation and / or footing that may cross beyond the boundary lines of the parcel herein described are not shown hereon.
#16 Not valid without the signature and original seal of a Florida Licensed Surveyor and Mapper. additions or deletions to survey maps or reports by other than the signing party or parties.
#17 Contact the appropriate authority prior to any design work on the herein described parcel for building and zoning information.
#18 Underground Utilities are not depicted hereon, contact the appropriate authority prior to any design work or construction on the property herein described. Surveyor shall be notified as to any deviation from utilities shown hereon.
#19 Ownership subject to Opinion of Title.
#20 The location of the Flood Zone lines shown hereon are an approximate, based on the FEMA flood maps website. Confirmation of said Flood Zone lines location must be made with FEMA prior to any design.

AFA & Company, Inc. Land Surveyors

Professional
Surveyors & Mappers LB 7498
13050 S.W. 133rd Court
Miami Florida, 33186
E-mail: afaco@bellsouth.net
Ph: (305) 234-0588

This certifies that the survey of the property described hereon was made under my supervision & that the survey meets the Standards of Practice set forth by the Florida Board of Professional Land Surveyors & Mappers in Chapter 5J-17.052 of Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.
& That the Sketch hereon is a true and accurate representation thereof to the best of my knowledge and Belief, subject to notes and notations shown hereon.

Armando Alvarez

Digitally signed by Armando Alvarez
DN: c=US, o=AFA and Company Inc, dsQualifier=A01410C000001888CB0346D0015FAA, cn=Armando Alvarez
Date: 2023.09.22 09:44:25 -04'00'

Armando F. Alvarez
Professional Surveyor & Mapper #5526
State of Florida
Not Valid unless Signed

Received:
By:
Date:

" THE GREAT CITY "

City of OPA-LOCKA Florida

PLANNING & ZONING BOARD MEETING SCHEDULE AND REQUIREMENTS FY 2022-2023

TOTAL FEES: $_____New Fees as of October 1, 2015

FY 2020-2021 Meeting Dates (1st Tuesday of Each Month)	**Date Application Found Sufficient**
October 4, 2022	August 19, 2022
November 8, 2022	September 16, 2022
December 6, 2022	October 14, 2022
January 3, 2023	November 18, 2022
February 7, 2023	December 16, 2022
March 7, 2023	January 13, 2023
April 4, 2023	February 18, 2023
May 2, 2023	March 17, 2023
June 6, 2023	April 14, 2023
July 11, 2023	May 19, 2023
August 1, 2023	June 16, 2023
September 5, 2023	July 21, 2023

1. All individuals seeking to appear before the Planning & Zoning Board must submit a complete Planning & Zoning Board application, with the required documents and fees totaling (as established by ordinance), paid by check or money order to the City of Opa-locka. Failure to submit all documents and fees will result in your case not being scheduled to be heard at a meeting.

2. If the applicant seeking to appear before the Planning & Zoning Board is not the property owner he must provide an affidavit of authorization from the property owner.

3. All regular meetings are held on the first Tuesday of each month at the City of Opa-locka City Commission Chambers, Meeting Time 7:00 P.M. *(time and location are subject to change, please check with the Planning and Community Development Department for exact time and location of the meetings).*

4. Application package must include all required documents per checklist and fees of The City of Opa-locka. The application will be reviewed by the Department and will be scheduled for the next P&Z meeting upon finding of sufficiency.

5. You are required to complete and return this application along with all the information and documentation (see page 2 check list) requested to the:

City of Opa-locka
Planning & Community Development Department
780 Fishermen Street 4th floor
Opa-locka, FL 33054
Telephone: 305-953-2868, Ext. 1503
Facsimile: 305-953-3060

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

" THE GREAT CITY "

City of OPA-LOCKA Florida

PLANNING & ZONING BOARD APPLICATION

APPLICATION NUMBER: _____ CHECK NUMBER: _____ DATE RECEIVED: _____

PROPERTY OWNER'S NAME: DMG INVESTMENT TRUST LLC

PROPERTY OWNER'S ADDRESS: 11890 SW 8TH ST STE 510 MIAMI, FL 33184
Number/Street City State/Zip Code

APPLICANT'S NAME: DMG INVESTMENT TRUST LLC

APPLICANT'S ADDRESS: 11890 SW 8TH ST STE 510 MIAMI, FL 33184
Number/Street City State/Zip Code

PHONE NUMBER: OFFICE 786-254-7895 HOME 786-413-5734 OTHER _____

SUBJECT PROPERTY ADDRESS: 13600 NW 17TH AVE OPALOCKA FL 33054
Number/Street

TAX FOLIO NUMBER: 08-2122-018-0200 PRESENT ZONING: RU-1

LEGAL DESCRIPTION: PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

Please check specific request:

___Tentative Plat
___Final Plat
___Comprehensive Plan Amendment: ___Small Scale; ___Large Scale *(please specify type of amendment below)*
___ Rezoning
___Drainage Plan
___Fill Permit Request
___Preliminary Site Plan Review
___Final Site Plan Review
___Conditional Use Permit – No Plans
___Conditional Use Permit – With Plans
___Special Exception – No Plans
✓Special Exception – With Plans
___Development Agreement
___Restrictive Covenant
___Other – Please specify: _____

Add any additional information that may be of importance to this request:

_____

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

PLANNING & ZONING BOARD APPLICATION
(Checklist)

Applications will not be accepted without the following data. For a public hearing, all items below are necessary and must be submitted.

✓ Completed application form

✓ Application fee payable to the City of Opa-locka by check or money order

✓ Copy of property owner's and/or applicant's driver license/photo I.D. & Incorporation Documents (Inc., LLC, …)

✓ Affidavit (**see below**), and power of attorney of the property owner (**page 3**) (**Both must be Notarized**)

✓ A completed Neighborhood Petition form (attached) with the signature of each property owner in front, in the rear, to the left and to the right of the subject property, indicating his or her support for the proposed project. (Must include name, address, folio and phone number).

✓ All preliminary and final site plans, along with property survey, signed and notarized application(s) must be submitted on flash drive in PDF format.

✓ Fifteen (15) certified boundary and topographic surveys of the property (two copies size 36 x 24 inches & 13 copies 11 x 17 inches). (The submitted property survey must not exceed a maximum of two (2) years from date created in order to be considered acceptable by the City of Opa-locka)

✓ Fifteen (15) copies of Site Development Plan showing all drainage, water, sewer, structures, landscaping and parking in accordance with the City's zoning ordinance; (two copies size 36 x 24 inches & 13 copies size 11 x 17 inches & at least 7 original Sealed Copies)

✓ Map showing parcel to be considered and all properties' legal descriptions thereof, within 375' radius of said parcel. Map to be 1" = 100" scale. Owner's name, address, folio number and legal description on each parcel (Original and 2 copies size of document to accommodate scale)

✓ Narrative concept must be submitted with application

AFFIDAVIT

I, Joel Dominguez, being first duly sworn, depose and say that I am the **OWNER** of the property ,and I understand that this application must be complete and accurate before a public hearing can be advertised.

Signature

09/19/2023
Date

Sworn to and subscribed before me:

This 19 day of September, 2023

Noel J Cardenas
Notary Public
Attach copy of identification

My commission expires 7/19/2026

Notary Public State of Florida
Noel Javier Cardenas
My Commission HH 289807
Expires 7/19/2026

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

PLANNING & ZONING BOARD APPLICATION
POWER OF ATTORNEY

This form is to be attached to all applications, and to be returned with the application. No application will be honored or persons heard by the Planning & Zoning Board unless a notarized copy of this Power of Attorney is submitted.

To: City of Opa-locka
From:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Subject: Power of Attorney (authorization for a person, other than the property owner, to speak in the property owner's behalf).

I _____, being first duly sworn, depose and say that I am the owner of the property legally described as:

_____
_____
_____
_____
_____

I do give to _____ the power of Attorney and authority to speak in my behalf in reference to the above described property. Further, by affixing my notarized signature to this document, I also authorize _____ to negotiate and commit to the City Commission and City Administration in my behalf. I will abide by all final determinations of the City Commission and City Administration.

_____
Signature

_____
Date

Sworn to and subscribed before me:

This_____ day of _____,_____

_____ My commission expires:_____
Notary Public

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

Attach copy of identification

PLANNING & ZONING BOARD
NEIGHBORHOOD PETITION

RE: PROPERTY ADDRESS: 13600 NW 17TH AVE OPA-LCOKA, FL 33054

LEGAL DESCRIPTION: PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

I SUPPORT THIS DEVELOPMENT REQUEST _____

I DO NOT SUPPORT THIS DEVELOPMENT REQUEST _____

PROPERTY OWNER'S NAME: JEAN J BOUCICAUT PHONE: _____

ADDRESS (If different): 13580 NW 17 AVE

_____
Signature

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

Attach copy of identification

PLANNING & ZONING BOARD
NEIGHBORHOOD PETITION

RE: PROPERTY ADDRESS: 13600 NW 17TH AVE OPA-LCOKA, FL 33054

LEGAL DESCRIPTION: PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

I SUPPORT THIS DEVELOPMENT REQUEST _____

I DO NOT SUPPORT THIS DEVELOPMENT REQUEST _____

PROPERTY OWNER'S NAME: HANNAH V DUNBAR PHONE:_____

ADDRESS (If different): 1710 OPA LOCKA BLVD

_____
Signature

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

COMPANY RESOLUTION / INCUMBENCY CERTIFICATE OF THE MEMBER(S) OF DMG INVESTMENT TRUST LLC, A FLORIDA LIMITED LIABILITY COMPANY

WHEREAS, **DMG INVESTMENT TRUST LLC, a Florida Limited Liability Company**, ("Company"), is the owner of the real property located at: 13600 NW 17 AVE MIAMI, FL 33054.

WHEREAS, said limited liability company is currently in good standing under the laws of the State of Florida, under valid Articles of Organization and has not been terminated or dissolved and Joel A. Dominguez, Authorized Member of DMG INVESTMENT GROUP LLC, as authorized member of DMG INVESTMENT TRUST LLC is given authority by the Articles of Organization to execute any and all documents on behalf of the limited liability company.

WHEREAS, the Company has authorized Joel A. Dominguez, Authorized Member of DMG INVESTMENT GROUP LLC, as authorized member of DMG INVESTMENT TRUST LLC to execute any and all instruments which may be required in connection with he following property:

13600 NW 17 AVE MIAMI, FL 33054

FURTHER RESOLVED, no dissolution, bankruptcy or insolvency proceeding with respect to the Company or its Members have been filed, no creditors have acquired or are attempting to acquire control of the Company by executing on, or attaching or seizing the Member's interest in the Company.

FURTHER RESOLVED, the following are duly elected or appointed to the offices of the Company as set forth opposite their names and incumbent in such offices as of the date hereof and that there are no other officers other than these:

OPTIMUM TRADING LLC, a Florida limited liability company

DMG INVESTMENT GROUP LLC, a Florida limited liability company

CERTIFICATE

We, the undersigned, hereby certify that, as of the 31 day of May, 2023, **DMG INVESTMENT TRUST LLC, a Florida Limited Liability Company**, is authorized and existing under the laws of the State of Florida, that the foregoing is a true copy of the Resolution adopted by the Members at a special meeting duly called and held of the 31 day of May, 2023 and that such resolution has not been rescinded or modified, and does not contravene any provisions of the Articles of Incorporation of **DMG INVESTMENT TRUST LLC, a Florida Limited Liability Company**.

IN WITNESS WHEREOF, the undersigned have affixed their names as members of this Company, this 31 day of May, 2023.

Members:

OPTIMUM TRADING LLC, a Florida limited liability company

By: Yoel Dominguez, Authorized Member

By: Yazmin Dominguez, Authorized Member

DMG INVESTMENT GROUP LLC, a Florida limited liability company

By: Joel A. Dominguez, Authorized Member



Detail by Entity Name

Florida Limited Liability Company
DMG INVESTMENT TRUST LLC

Filing Information

Document Number	L21000128122
FEI/EIN Number	87-1379054
Date Filed	03/18/2021
Effective Date	03/15/2021
State	FL
Status	ACTIVE

Principal Address

11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Changed: 01/04/2023

Mailing Address

11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Changed: 01/04/2023

Registered Agent Name & Address

DMG INVESTMENT GROUP
11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Name Changed: 02/28/2022

Address Changed: 01/04/2023

Authorized Person(s) Detail

Name & Address

Title AMBR

OPTIMUM TRADING LLC

11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Title AMBR

DMG INVESTMENT GROUP LLC
11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Annual Reports

Report Year	Filed Date
2022	02/28/2022
2023	01/04/2023

Document Images

01/04/2023 -- ANNUAL REPORT	View image in PDF format
02/28/2022 -- ANNUAL REPORT	View image in PDF format
03/18/2021 -- Florida Limited Liability	View image in PDF format

	FOLIO	PROPERTY ADDRESS	OWNER	LEGAL DESCRIPTION
1	08-2122-018-0200	SUBJECT PROPERTY	DMG INVESTMENT TRUST LLC	PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6
2	08-2122-000-0270	1761 OPA LOCKA BLVD	OPA PARK LLC	22 52 41 11.90 AC BEG 308.07FTN & 25FTE OF SW COR OF SE1/4 OF SE1/4 TH NELY & ELY AD 708.87FT E426.25FT N130FT N 41 DEG W 890.32FT S 44 DEG W 499.21 FT E183.18FT S332.27FT W308.18FT S TO POB ALL LYG N OF OPA LOCKA BLVD LESS EXT AREA OF CURVE IN SW COR FOR R/W OR 25266-3821 0107 5
3	08-2122-000-0195	1701 OPA LOCKA BLVD	OPA PARK LLC	22 52 41 1.563 AC BEG 35FTW & 2090.73FTS OF NE COR OF SE1/4 OF SEC TH W200FT N130FT N 41 DEG W 126.10FT TO THE WATER EDGE OF LAKE N 44 DEG E 70.88FT N 64 DEG E 68.54FT E172.89FT S305.91FT TO POB LOT SIZE 68084 SQ FT OR 25266-3821 0107 5
4	30-2123-000-0070	1601 OPA LOCKA BLVD	TRUSTEE CHURCH OF GOD	23 52 41 3.48 AC W1/2 OF SW1/4 OF SW1/4 LYG N OF OPA LOCKA BLVD LESS N528FT & LESS W35FT & LESS EXT AREA OF CURVE IN SW COR FOR R/W LOT SIZE 151452 SQ FT
5	06-2123-000-0050	1525 NW 135 ST	CITY OF NORTH MIAMI	23 52 41 13.66 AC M/L SW1/4 OF SW1/4 LYG S OF OPA LOCKA BLVD & N OF 135 ST R/W LOT SIZE 595030 SQ FT
6	08-2122-018-0140	1760 OPA LOCKA BLVD	JASMINE K HAMLIN	22 52 41 1ST ADDN TO PINE TREE LAKE LOT 34 PB 62-85 LOT SIZE 60.000 X 185 COC 25436-1608 02 2007 4
7	08-2122-018-0150	1750 OPA LOCKA BLVD	IRIS A EVANGELISTA	1ST ADDN TO PINE TREE LAKE LOT 35 PB 62-85 LOT SIZE 60.000 X 175 OR 19873-2922 0601 5
8	08-2122-018-0160	1740 OPA LOCKA BLVD	MARY E MOOD	22 52 41 PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 36 LOT SIZE 60.000 X 165 OR 10580-1681 1179 1
9	08-2122-018-0170	1730 OPA LOCKA BLVD	ANDRES PERDOMO	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 37 LOT SIZE 60.000 X 155 OR 20307-2372 0302 1 COC 23837-3194 09 2005 4
10	08-2122-018-0180	1720 OPA LOCKA BLVD	WILLIE F HENRY &W CLARETTA SMITH	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 38 LOT SIZE 60.000 X 148 OR 18600-0257 0499 1
11	08-2122-018-0190	1710 OPA LOCKA BLVD	HANNAH V DUNBAR	1ST ADDN TO PINE TREE LAKE BEG AT NW COR LOT 39 E60FT S100FT S 29 DEG W50FT SWLY40FT N145FT TO POB LOT SIZE 8250 SQ FT PB 62-85 COC 22650-4111-4119 0804 6
12	08-2122-018-0210	13580 NW 17 AVE	J J BOUCICAUT & W RAYMONDE	PB 62-85 1ST ADDN TO PINE TREE LAKE PORT OF LOTS 39 & 41 BEG NE COR OF LOT 41 TH S65.41FT W100FT N25FT SWLY9.5FT N 29 DEG E50FT E88.52FT TO POB LOT SIZE 6569 SQUARE FEET OR 11073-1875 0481 6
13	08-2122-018-0220	13560 NW 17 AVE	FANNIE M BRUNSON RAMSEY JERRY RAMSEY	PINE TREE LAKE 1ST ADD PB 62-85 LOT 42 LOT SIZE 65.000 X 100 OR 16153-4061 1193 1
14	08-2122-018-0230	13540 NW 17 AVE	CARMELINE PIERRE &H GIDE	22 52 41 PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 43 LOT SIZE 65.000 X 103 OR 19957-0324 0401 5
15	08-2122-018-0240	13520 NW 17 AVE	GEORGE E ELLIS JR	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 44 LOT SIZE 65.200 X 106 OR 16780-0969 0495 1
16	08-2122-001-0010	1701 NW 135 ST	MILSE MARZO &W PLACIDA	PINE TREE LAKE PB 58-64 LOT 1 LOT SIZE IRREGULAR OR 20005-3096 1001 1
17	08-2122-001-0020	1711 NW 135 ST	DELLERSON FAMILY LLC 2	PINE TREE LAKE PB 58-64 LOT 2 & PROP INT IN LAKE LOT SIZE 62.000 X 100 OR 20261-1732 0102 5
18	08-2122-001-0030	1721 NW 135 ST	JOSE MARRERO &W MARIBEL TORRES	22 52 41 PINE TREE LAKE PB 58-64 LOT 3 & PROP INT IN LAKE OR 17634-0923 0597 1 COC 23103-4650 11 2004 4
19	08-2122-001-0040	1731 NW 135 ST	COMPTON HARRIS &W BARBARA	PINE TREE LAKE PB 58-64 LOT 4 & PROP INT IN LAKE LOT SIZE 62.000 X 100 G CASE # 87-28782 24

	FOLIO	PROPERTY ADDRESS	OWNER	LEGAL DESCRIPTION
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4	30-2123-000-0070	1601 OPA LOCKA BLVD	TRUSTEE CHURCH OF GOD	23 52 41 3.48 AC W1/2 OF SW1/4 OF SW1/4 LYG N OF OPA LOCKA BLVD LESS N528FT & LESS W35FT & LESS EXT AREA OF CURVE IN SW COR FOR R/W LOT SIZE 151452 SQ FT
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7	08-2122-018-0150	1750 OPA LOCKA BLVD	IRIS A EVANGELISTA	1ST ADDN TO PINE TREE LAKE LOT 35 PB 62-85 LOT SIZE 60.000 X 175 OR 19873-2922 0601 5
8	08-2122-018-0160	1740 OPA LOCKA BLVD	MARY E MOOD	22 52 41 PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 36 LOT SIZE 60.000 X 165 OR 10580-1681 1179 1
9	08-2122-018-0170	1730 OPA LOCKA BLVD	ANDRES PERDOMO	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 37 LOT SIZE 60.000 X 155 OR 20307-2372 0302 1 COC 23837-3194 09 2005 4
10	08-2122-018-0180	1720 OPA LOCKA BLVD	WILLIE F HENRY &W CLARETTA SMITH	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 38 LOT SIZE 60.000 X 148 OR 18600-0257 0499 1
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12	08-2122-018-0210	13580 NW 17 AVE	J J BOUCICAUT & W RAYMONDE	PB 62-85 1ST ADDN TO PINE TREE LAKE PORT OF LOTS 39 & 41 BEG NE COR OF LOT 41 TH S65.41FT W100FT N25FT SWLY9.5FT N 29 DEG E50FT E88.52FT TO POB LOT SIZE 6569 SQUARE FEET OR 11073-1875 0481 6
13	08-2122-018-0220	13560 NW 17 AVE	FANNIE M BRUNSON RAMSEY JERRY RAMSEY	PINE TREE LAKE 1ST ADD PB 62-85 LOT 42 LOT SIZE 65.000 X 100 OR 16153-4061 1193 1
14	08-2122-018-0230	13540 NW 17 AVE	CARMELINE PIERRE &H GIDE	22 52 41 PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 43 LOT SIZE 65.000 X 103 OR 19957-0324 0401 5
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16	08-2122-001-0010	1701 NW 135 ST	MILSE MARZO &W PLACIDA	PINE TREE LAKE PB 58-64 LOT 1 LOT SIZE IRREGULAR OR 20005-3096 1001 1
17	08-2122-001-0020	1711 NW 135 ST	DELLERSON FAMILY LLC 2	PINE TREE LAKE PB 58-64 LOT 2 & PROP INT IN LAKE LOT SIZE 62.000 X 100 OR 20261-1732 0102 5
18	08-2122-001-0030	1721 NW 135 ST	JOSE MARRERO &W MARIBEL TORRES	22 52 41 PINE TREE LAKE PB 58-64 LOT 3 & PROP INT IN LAKE OR 17634-0923 0597 1 COC 23103-4650 11 2004 4
19	08-2122-001-0040	1731 NW 135 ST	COMPTON HARRIS &W BARBARA	PINE TREE LAKE PB 58-64 LOT 4 & PROP INT IN LAKE LOT SIZE 62.000 X 100 G CASE # 87-28782 24

DMG
DEVELOPERS

PROJECT NARRATIVE

Preliminary Development Plan.

Pine Tree Lakes Twin-homes
13600 NW 17th Ave Miami, FL 33054

This narrative is written to provide a general project concept, the initial project timing, and details regarding the overall development. The proposed project is located near the southwest corner of NW 17th Avenue and Opa-Locka Blvd in Opa-Locka, Florida.

A site plan is included at the end of this narrative.

The project is consistent with several visions of the Opa-Locka's 20/30 Comprehensive Plan and will revitalize that corner.

The overall lot coverage is way under the required 35% at 2,252 SF or 22%.

The project consists of two 26'X42' side-by-side Modular units manufactured by a local business.

The developer takes into consideration a 15FT easement along the south limit of the property to allow the city access to the Pine Tree Lake for regular maintenance.

DMG Investment Trust LLC DBA / DMG DEVELOPERS
11890 SW 8th ST Suite 510 Miami, FL 33184
786.413.5734
www.dmgdevelopers.com

Building & Licensing
Planning & Community Development

780 Fisherman Street, 4th Floor
Opa-locka, FL 33054

Gregory D. Gay, Director
Development Services

Phone: (305) 953-2868, Ext. 1501
Fax: (305) 953-3060

December 14, 2021

DMG Investment Group, LLC
C/O Joel A. Dominguez,
178 Giralda Ave, 2nd Floor
Coral Gables, FL 33134

RE: Zoning Review-For the property at the corner Of NW 17th Ave & Opa-locka Boulevard, Opa-locka, FL 33054
Folio: 08-2122-018-0200

Mr. Dominguez,

Thank you for your interest in developing the property identified by folio 08-2122-018-0200. On December 2nd, 2021, we discussed your options to develop this 10,575 square foot property that is zoned for single-family development. We know you are interested in obtaining the highest and best use for this site and after review of the City Land Development Regulations we therefore inform you of the following options that are available to you:

1. Option 1 - Build one single family homes that complies with the required setbacks. (Single Family Detached) Submit building permits only.
2. Option 2 - Build two single family homes that share a common wall between the two homes [also referred to as a twin home] and each home complies with the required setbacks. (Single Family Attached) This path requires a formal Special Exception hearing review before the Planning & Zoning Board and formal review and approval by the City Commission at a public hearing. A maintenance easement for access to the lake would need to be considered as part of the siteplan of the property.

3. Option 3 – Replat your property into two lots. Each lot will be 5287.5 sf. A maintena easement for access to the lake would need to be considered as part of the replat of property. Build two single family homes by right or build two twinhomes by Spe Exception. Split the property will permit you to build four single family homes wl two [2] of each would share a common wall on each new parcel and each hc complies with the required setbacks. (Single Family Attached) This path require formal Special Exception hearing review before the Planning & Zoning Board and for review and approval by the City Commission at a public hearing.
4. Option 4 - Rezone the site to Duplex and build two duplexes/twin homes. rezoning request would require formal review before a Planning & Zoning Board formal review and approval by the City Commission at a public hearing. The site p for the proposed two duplex development would also be presented for review approval. A maintenance easement for access to the lake would need to be conside as part of the rezoning of the property.

Option 4 may be the most challenging as the PCD Department, by policy, is required to recomm against any zoning change request that may not meet the criteria for recommendation to change zoning to a higher adjacent residential zoning. We can further discuss this process if it is b considered.

This should make your options clear, however if you have any questions, please advise.

Thank you for helping make our City Great!

Sincerely,

Gerald Lee, Zoning Official-Planning & Community Development

cc Gregory D. Gay, Director of Development Services - B&L|PCD

PLANNING & ZONING BOARD

DECEMBER 05TH

2023

CONSTRUCTION OF A TWIN HOME BUILDING- SPECIAL EXCEPTION REVIEW

APPLICANT'S REQUEST:

Staff Report

A RESOLUTION OF THE PLANNING & ZONING BOARD OF THE CITY OF OPA-LOCKA, FLORIDA, RECOMMENDING APPROVAL OR DENIAL OF THE SPECIAL EXCEPTION REVIEW REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIOS 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.



I. Site Background

- According to Miami-Dade County Property Appraiser's website, the subject Property's legal description is as follo

PB 65-85
1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY 11.5 FT N 29 DEG E50 FT E88.52 FT N100 FT W100FT W100 FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

- The proposed project site is a vacant 10,575 square foot lot located at the south-east corner of Opa locka Boulevard and NW 17th Avenue. The site is zoned Single Family Residential and has a land use designation of Low-Density Residential. With the current residential zoning R-1, the square footage of this parcel and the residential land use designation, this site could be used for a twin home development after Special Exception Review approval and after Site Plan Review approval.



Figure 1: Google Street View: West View from NW 17th Avenue



II. Project Details

- **Applicant's intent**

The Applicant, DMG Investment Trust, LLC. intends to construct a twin home on this single family 10,575 square foot lot. Twin homes are permitted in the Duplex (R-2 Zoning District and in the Single Family R-1 Zoning district after Special Exception Review approval. They also intend to provide appropriate parking and landscaping in accordance with the City of Opa-locka's Land Development Regulations.

The applicant has submitted two application requests for the development of this site:

1. To review for special exception an opportunity to build a twin home on this site.
2. To review and consider for approval the site plan to build a twin home on this site.

To accommodate the new intended uses for this vacant residential site will require the review and recommendation of the Planning & Zoning Board and the review and approval of the City Commission concerning these two requests.

Site Computations & Land Development Regulation / Zoning Code | Table 1

Applicant	DMG INVESTMENT TRUST, LLC		
Folio Number (s)	Opa-locka: 08-2122-018-0200;		
Address Location	Corner of NW 17 Avenue and Opa locka Boulevard, Opa-locka, FL 33054		
Building (s) Footprint	Building Footprint/Building Coverage Building 1 1,170 SF; Building Footprint/Building Coverage Building 2 1,170 SF Greenspace/Landscape Area – 2,206 SF		
Floor Area Ratio	<1.0 FAR N/A		
Zoning	**R-1 – Single Family Residential**		
Zoning Code Consistency	The proposed use of this property for residential twin home use is consistent with the City Land Development Regulations as a Special Exception.		
Existing Land Use	Vacant Land		
Future Land Use Designation	Low- Density Residential		
Comprehensive Plan Consistency	- The proposed use for a single family to occupy each of the twin homes is consistent with the Comprehensive Plan		
Applicable LDR Sections	Ordinance no. 15-31, Article III Sec; 22-55; Article IV Sec. 22-79, Article 22-83,		
SET BACKS/ YARD	**REQUIRED**	**PROPOSED**	**COMPLIANCE**
Bldg. 1 Front	**25 Feet**	**25 Feet**	**YES**
Bldg. 2 Front	**25 Feet**	**25 Feet**	**YES**
Bldg. 1 Rear	**15 Feet**	**30 Feet**	**Yes**
Bldg. 2 Rear	**15 Feet**	**30 Feet**	**Yes**
Side Interior	**7.5 Feet**	**23 Feet**	**YES**
Side Street	**15 Feet**	**25 Feet**	**Yes**
Corner Lots/ Other	**N/A**	**N/A**	**N/A**
Lot Coverage (Max Impervious Area)	**60%**	**45%**	**Yes**
Lot Density	**N/A**	**N/A**	**N/A**
Lot Size	**4,800 SF**	**10,575 SF**	**YES**

Lot Width	**N/A**	**N/A**	**N/A**
Building Height	**2 Stories or 25 Feet whichever less**	**Twin Home:** 1 Stories/ 25 Feet	**YES**
Structure Length	**N/A**	**N/A**	**N/A**
Other Vehicular Use Area Landscaping	**N/A** **Total Landscaping Area**	**N/A** **2,206 sq. ft.**	**Yes**
Parking Details	**Single Family/Twin Home** **2 Parking Spaces for each unit**	**Two Parking Spaces for each unit.**	**YES**
Landscape/ Pervious Lot Coverage	**10% minimum required pervious**	**27% provided**	**YES**
Notification Requirement	This request will be properly noticed pursuant to state law and city charter by the city clerk's office. - A copy of notice for advertisement titles were given to the Clerk's Office on Tuesday, November 21st, 2023. To be advertise at least 10 days prior to this Planning and Zoning Board meeting on Tuesday, December 5th, 2023. - City Commission Meeting: TBD		
Local Government Action Required	The City Commission must review this tentative plat and consider approval/disapproval after it is reviewed by the Planning and Zoning Board and any other applicable board or agency.		

• Overall Analysis

Existing Conditions:

- The Subject Property is generally adjacent to residential properties to the west and vacant land outside the City of Opa-locka to the east. There is also Industrial zoned properties North of this site.
- This development is within a residential neighborhood.
- Property is currently vacant and overgrown.

PZAB Special Exception Review Criteria- (Per Ordinance 15-31, Sec. 22-60, B Approval Criteria)

1. Compliance with the City's Comprehensive Plan.
2. Consistent with the "character and purpose" of the zoning district.
3. The size, shape and character of the property are suited for the proposed use.
4. Compatibility with the existing uses near the property.
5. Will not adversely affect the development of the general neighborhood or district.
6. Will not generate vehicular traffic or create vehicular circulation or ingress/egress problems or parking demands that have an unfavorable impact on surrounding properties when compared with uses permitted by right in the same district.
7. Potential for fire and/or other equally or greater dangerous hazards.
8. Create an unfavorable environment impacts on surrounding uses (e.g. noise, glare, smoke, dust, odor, fumes, water pollution, or general nuisance).
9. Consistent with existing and planned pedestrian and vehicular circulation adjacent to and near the property.

10. Site is adequately served by essential public services and facilities not requiring additional public expense in infrastructure improvements.
11. Will not adversely affect any site or feature of historical, cultural, natural or scenic importance.
12. Will not be contrary to the public health, safety, and welfare, provided that denial based exclusively on this language shall include explicit findings regarding the way in which granting the special exception would be contrary to the public health, safety and welfare.

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT: SPECIAL EXCEPTION REVIEW ANALYSIS:
The Development if approved

Would be in compliance with the City's Comprehensive Plan
Would be consistent with the character and purpose of the zoning district.
The size, shape and character of the property are suited for the proposed use.
Would be compatible with the existing uses near & adjacent to the property.
Would not adversely affect the development of the general neighborhood or district.
Would not generate vehicular traffic or create vehicular circulation or ingress/egress problems that would have an unfavorable impact on surrounding properties when compared with uses permitted by right in the same district given the size of the property.
Would not increase the potential for fire or /and other equally or greater dangerous hazards.
Would not create any unfavorable environmental impacts on surrounding uses, including noise, glare, smoke, dust, odor, fumes, water pollution, or general nuisance.
Would be consistent with existing and planned pedestrian and vehicular circulation adjacent to and near the property.

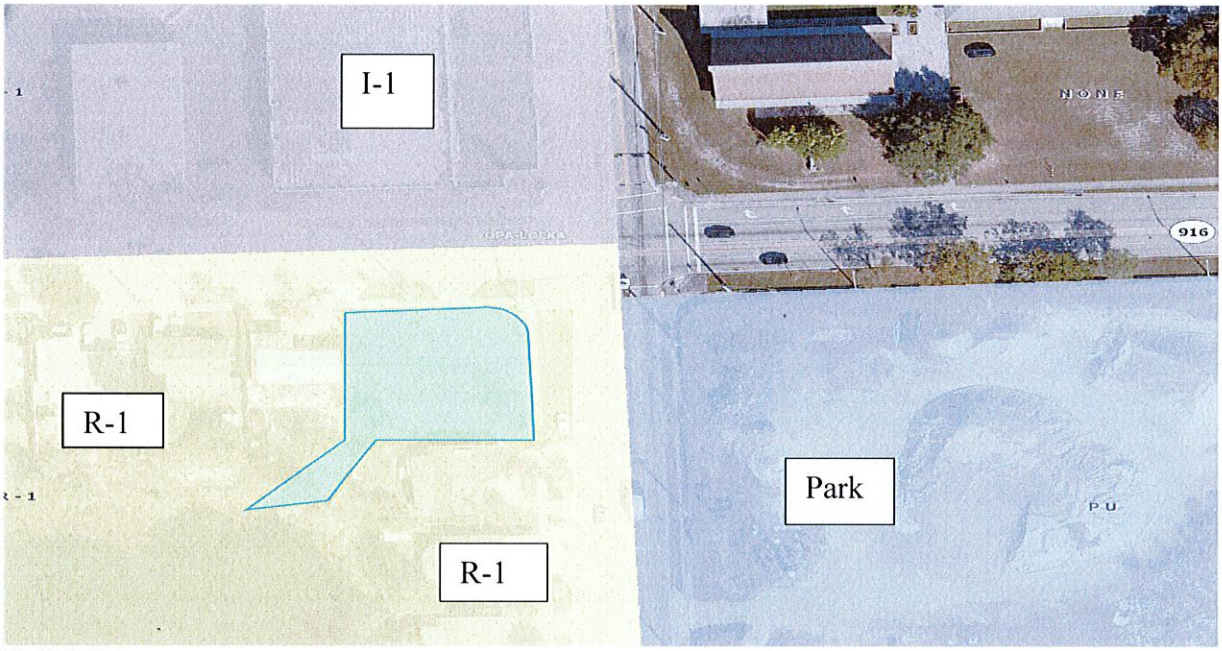
PZAB SITE PLAN APPROVAL CRITERIA-(Per Ordinance 15-31, Sec. 22-55, B Approval Criteria

1. The development permitted by the application, if granted, conforms to the Comprehensive Plan; is consistent with applicable area or neighborhood studies or plans, and would serve a public benefit warranting the granting of the application at the time it is considered.
2. The development permitted by the application, if granted, will have a favorable or unfavorable impact on the economy of the City.
3. The development permitted by the application, if granted, will efficiently use or not unduly burden water, sewer, solid waste disposal, recreation, education or other necessary public facilities which have been constructed or planned and budgeted for construction.

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT: SITE PLAN ANALYSIS

The development if approved conforms to the Comprehensive Plan.
The development if approved will have a favorable impact on the economy of the City.
The development if approved will efficiently use or not unduly burden water, sewer, solid waste disposal, recreation, education or other necessary public facilities which have been constructed or planned and budgeted for construction.

Surrounding Zoning Designation Map



The Site is highlighted in image

Surrounding Land Use and Zoning: Table 2

Location	Existing Land Use	Future Land Use (FLU)	Zoning
North	Commercial/Residential	Commercial/Residential	B-O to B-2/ R-1 R-2
South	Residential	Residential	R-TH
East	N/A	N/A	N/A
West	Residential	Residential	R-1

COMPLIES

- **General Character / Neighborhood Compatibility:** The proposed development use will be in Harmony with the general character of the surrounding neighborhood considering population density, design, scale, and bulk of any proposed new structures, intensity and character of activity, traffic and parking conditions?
  - **Findings:**
    - The propose development use to construct a twin home on this site is in harmony with the general characteristic of the surrounding neighborhood: Single Family Uses

- **Tree Preservation:** Compliance with Tree Preservation Ordinance required pursuant to City ORDINANCE NO.10-03

COMPLIES

  - **Findings:**
    - The Applicant is proposing to include landscaping for an area of 2,206 square feet. *(Please see attached Landscape Plan for Trees detailed information*).

- **Fence:** All fences constructed on property perimeters shall be in accordance with the requirements of the Land Development Regulation Section 22-134., however if additional walls, fences or hedges are installed they shall also comply with the requirements of this Section.
  - **Findings:**
    - The Applicant may install a fence in accordance with the LDR.

COMPLIES

- **Future Land Use:** Low Density Residential.
  - **Findings:**

- According to the City of Opa-locka Comprehensive Plan; the proposed project shall be located within the City's Low Density Residential LU category location which is appropriate for single family and duplex uses.

- **R-1 (Single-Family) Permitted Uses:** Project Specific: *Construction of a twin home on this vacant site.* **COMPLIES**
  - **Findings:**
    - According to the City's Land Development Regulation/ Zoning Code R-1 (Single-Family) zoning district would permit this use, if special exception review is approved by the City Commission. This use is compatible with the zoning of the proximal zoning district.

- **Community Comments/Petitions:** The Applicant verbally informed the Planning and Community Development Department that petitions were submitted to the surrounding businesses for signatures, comments or possible opposition.
  - **Findings:** The Planning and community Development Department has not received signed petitions submitted to the Neighboring Businesses as indicated by the Applicant.

COMPLIES

III. Project Need Assessment / other Required Approvals

1. Special Exception Review 3. Site Plan Review
   Application(s) submitted for Planning & Zoning Board Meeting (this meeting) Tuesday, December 5th, 2023

IV. Development Review Committee (DRC): *Meeting Review Comments*

1. **Capital Improvement Project (CIP):**
   - No issues reported for the proposed Site Plan
2. **Building:**
   - N/A
3. **Police:**
   - N/A
4. **Community Redevelopment Agency (CRA):**
   - N/A
5. **City Manager's Office (CMO):**
   - N/A
6. **Code Enforcement:**
   - N/A
7. **City Attorney's Office:**
   - Development Agreement under review
8. **Public works:**
   - N/A
9. **Inter-jurisdictional Review:**
   - N/A

V. Staff Recommendation:

- Staff recommend approval of the Special Exception Review and the Site Plan Review.

VI. **Attachments:**

- Site Plan

Planning and Community Development Department

	Name and Title	Initials
Project Planner	Randall Robinson, City Planner	
Zoning	Gerald J. Lee, Zoning Official	
Economic Development	Solomon Bankole, Manager	
Approved by	Gregory D. Gay, Director Planning and Community Development	

I. **Planning and Zoning Board Decision:** (PLEASE SEE MEETING MINUTES FOR DETAIL DISCUSSIONS)

Resolution No. 2023-12-12-03,

A RESOLUTION OF THE PLANNING & ZONING BOARD OF THE CITY OF OPA-LOCKA, FLORIDA, RECOMMENDING APPROVAL OR DENIAL OF THE SPECIAL EXCEPTION REVIEW REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIOS 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the applicant has appeared before this Board for the request in the application, and all evidence, documents and exhibits have been received and marked pursuant to the Code of Ordinance of the City of Opa-locka.

NOW, THEREFORE, IT IS RESOLVED AS FOLLOWS:

1) That the request in the application by the applicant be and the same is hereby

a. APPROVED ☐ DATE: 12-12-2023

b. DENIED ☐

c. NOT DETERMINE ☐ until additional consideration at the regular meeting to be held on__ / __ / ___

2) That the following special condition be and they are hereby imposed, conditioning the determination aforementioned:

a.

b.

*** The Planning and Zoning Board Approval of this request was approved by a - vote***

I HEREBY CERTIFY that the resolution containing the determination of this Board is a true and correct copy as is reflected upon the public records of the City of Opa-locka this day of

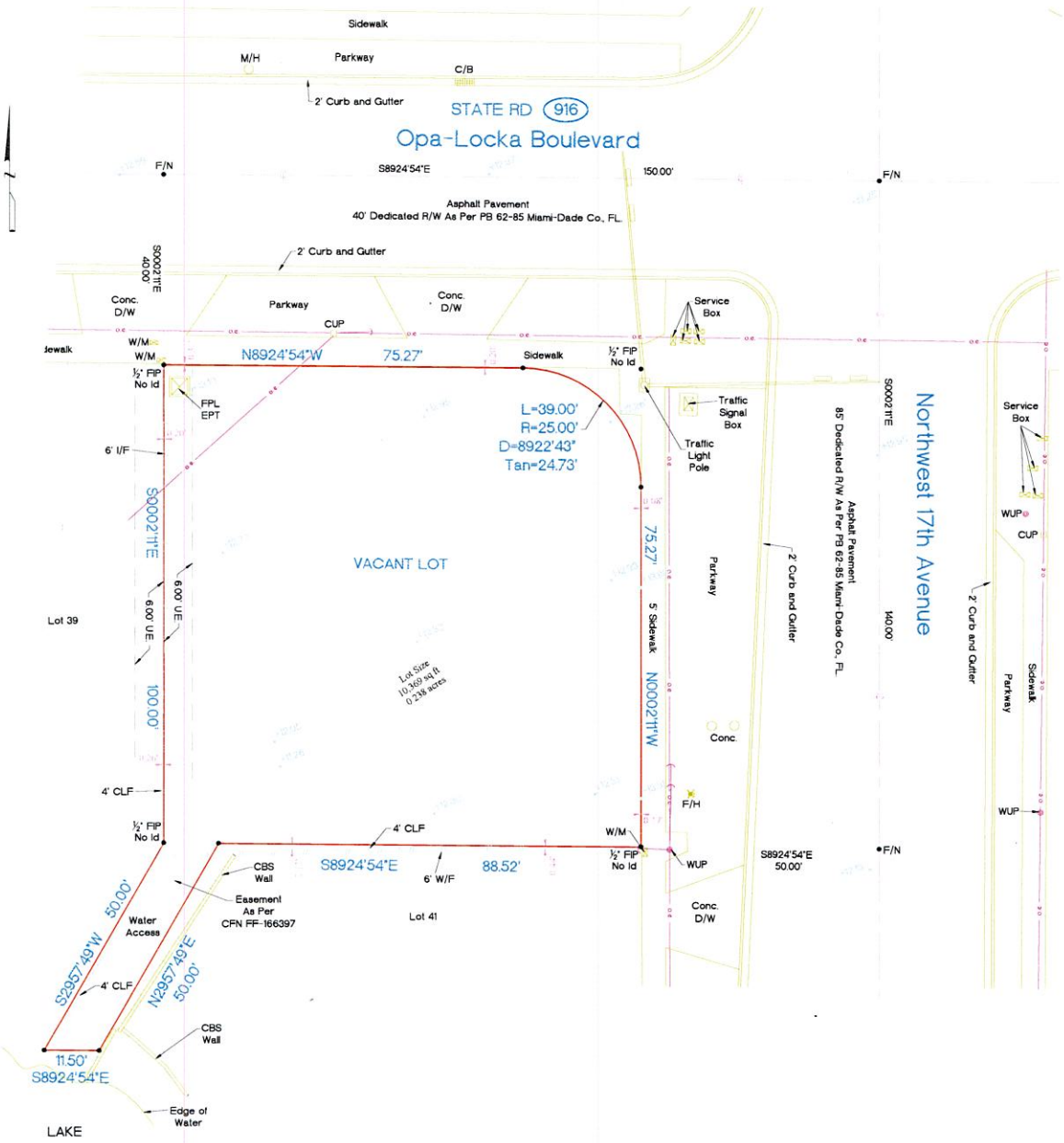
_____

Chairperson or Designee

The Following changes/recommendations are updates based on the Planning and Zoning Board Meeting discussions in regards to the proposed construction of a twin home building on this vacant property.

Boundary Survey

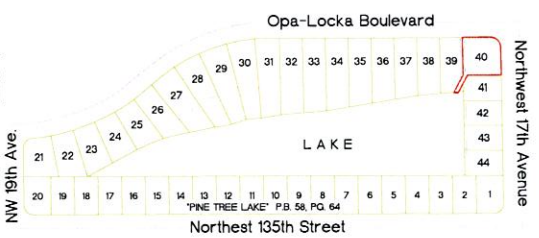
Graphic Scale 1" = 10'



Abbreviations of Legend

AVE.	=AVENUE
ASPH	=ASPHALT
A/W	=ANCHOR WIRE
A/C	=AIR CONDITIONER
BLDG	=BUILDING
B. CUR.	=BLOCK CORNER
CAL.	= CALCULATED
C.B.	=CATCH BASIN
C.L.F.	=CHAIN LINK FENCE
CONC.	=CONCRETE
COL.	=COLUMN
C.U.P.	=CONCRETE UTILITY POLE
C.L.P.	=CONCRETE LIGHT POLE
CBS	=CONCRETE BLOCK STRUCTURE
C.M.E.	=CANAL MAINTENANCE EASEMENT
D	=DELTA
D/W	=DRIVEWAY
D.M.E.	=DRAINAGE & MAINTENANCE EASEMENT
ENC.	=ENCROACHMENT
E.T.P.	=ELECTRIC TRANSFORMER PAD
F.P.L.	=FLORIDA POWER AND LIGHT
F.H.	=FIRE HYDRANT
F.I.P.	=FOUND IRON PIPE
F.F.	=FINISH FLOOR
DRF	=FOUND DRILL HOLE
F.R.	=FOUND REBAR
P.D.	=FOUND DISC
F/N	=FOUND NAIL
I/F	=IRON FENCE
L	=LENGHT
L.M.E.	=LAKE MAINTENANCE EASEMENT
L.F.E.	=LOWEST FLOOR ELEVATION
L.P.	=LIGHT POLE
MEAS.	=MEASURED
M.H.	=MAN HOLE
M/L	=MONUMENT LINE
N.G.V.D.	=NATIONAL GEODETIC VERTICAL DATUM
N.T.S.	=NOT TO SCALE
O.E.	=OVERHEAD ELECTRIC LINE
O/L	=ON LINE
P.C.P.	=PERMANENT CONTROL POINT
P.M.	=PARKING METER
P.C.	=POINT OF CURVATURE
P/W	=PARKWAY
PL.	=PLANTER
P.O.C.	=POINT OF COMMENCEMENT
P.O.B.	=POINT OF BEGINNING
R	=RADIUS
RES.	=RESIDENCE
R/W	=RIGHT OF WAY
S.D.H.	=SET DRILL HOLE
S/N	=SET NAIL
S.I.P.	=SET IRON PIPE
SDWLK	=SIDEWALK
ST.	=STREET
T.	=TANGENT
U.E.	=UTILITY EASEMENT
W/F	=WOOD FENCE
W.V.	=WATER VALVE
W.U.P.	=WOOD UTILITY POLE
	=WOOD FENCE
	=IRON FENCE
XXXXXXXXXX	=CBS WALL
	=CHAIN LINK FENCE
	=OVERHEAD ELEC.
	=CENTER LINE
	=EASEMENT
25.00'	=DIMETRS ELEVATIONS
	=BUILDING
	=DISTANCE
	=CATCH BASIN
	=WATER METER
	=W.U.P.
	=STATE ROAD
	=US HIGHWAY
	=INTERSTATE
	=MONITORY WELL

Location Sketch N.T.S.



LEGAL DESCRIPTION:

Lot 40 and the following described portion of Lots 39 and 41; Commence at the Northwest corner of Lot 40; thence run S00°02'11"E, along the West line of Lot 40, for 100 feet to the Southwest corner of Lot 40 and the Point of Beginning of the parcel of land hereinafter to be described; thence run S29°57'49"W for 50 feet, more or less to the shoreline of a lake; thence run Easterly along said shoreline for 11.5 feet more or less; thence run N29°57'49"E for 50 feet more or less to a point on the South line of Lot 40; thence run N89°24'54"W, along the South line of Lot 40 for 11.48 feet to the Point of Beginning, all lying in "FIRST ADDITION TO PINE TREE LAKE", according to the Plat Thereof as Recorded in Plat Book 62, Page 85, of the Public Records of Miami-Dade County, Florida.

CERTIFIED ONLY TO:

DMG Investment Trust LLC

PROPERTY ADDRESS:

13600 Northwest 17th Avenue
Opa-Locka Florida 3354

ELEVATION INFORMATION

National Flood Insurance Program

FEMA Elev. Reference to NGVD 1929

Comm Panel	120650
Panel #	0314
Firm Zone:	"X"
Date of Firm.	09-11-2009
Base Flood Elev.	N/A
F.Floor Elev.	N/A
Garage Elev.	N/A
Suffix.	"L"
Elev. Reference to NGVD 1929	

JOB #	23-1128
DATE	09-21-2023
PB	62-85

Surveyors Notes:

#1 Land Shown Hereon were not abstracted for Easement and /or Right of Way Records. The Easement / Right of Way Shown on Survey are as per plat of record unless otherwise noted

#2 Benchmark: Miami-Dade County Public Works Dept BM FID: 842, Name: PM0720, Elev: +13.14'

#3 Bearings as Shown hereon are Based upon Opa-Locka Boulevard, S89°24'54"E

#4 Please See Abbreviations

#5 Drawn By: A. Torres

#6 Date: 9-21-2023

#7 Completed Survey Field Date: 9-21-2023

#8 Doc No. 2023, Station Surveying Scion

#9 Last Revised:

#10 Zoned Building setback line not determined

Surveyor's Notes

#11 The bearus captioned Property was surveyed and described based on the Legal Description Provided by Client.

#12 This Certification is Only for the lands as Described, it is not a certification of Title, Zoning, Easements, or Freedom of encumbrances. ABSTRACT NOT REVIEWED

#13 There may be additional Restrictions not Shown on this survey that may be found in the Public Records of Said County. Examination of ABSTRACT OF TITLE will have to be made to determine recorded instruments, if any affecting the property

#14 Accuracy
The expected use of land, as classified in the Standards of Practice (51-17.052), is residential. The maximum relative distance accuracy for this type of boundary survey is 1:10 feet in 10,000 00 feet. the accuracy obtained by measurement and calculation of a closed geometric figure was found to exceed this requirement

#15 Foundation and / or footing that may cross beyond the boundary lines of the parcel bereas described are not shown hereon

#16 Not valid without the signature and original seal of a Florida Licensed Surveyor and Mapper. additions or deletions to survey maps or reports by other than the signing party or parties

#17 Contact the appropriate authority prior to any design work on the bereas described parcel for building and zoning information

#18 Underground Utilities are not depicted hereon, contact the appropriate authority prior to any design work or construction on the property hereas described. Surveyor shall be notified as to any deviation from utilities shown hereon

#19 Ownership subject to Opinion of Title

#20 The location of the Flood Zone lines shown hereon are an approximate, based on the FEMA flood maps website. Confirmation of said Flood Zone lines location must be made with FEMA prior to any design

Professional
Surveyors & Mappers LB 7498
13050 S.W. 133rd Court
Miami Florida, 33186
E-mail: afaco@bellsouth.net
Ph: (305) 234-0588

This certifies that the survey of the property described hereon was made under my supervision & that the survey meets the Standards of Practice set forth by the Florida Board of Professional Land Surveyors & Mappers in Chapter 5J-17.052 of Florida Administrative Code, pursuant to Section 472.027, Florida Statutes & That the Sketch hereon is a true and accurate representation thereof to the best of my knowledge and Belief, subject to notes and notations shown hereon.

Armando Alvarez

Digitally signed by Armando Alvarez
DN: c=US, o=AFA & Company, Inc., ou=Professional Surveyor & Mapper, cn=Armando Alvarez, 0.9.2342.19200300.100.1.1=PS6340
Date: 2023.09.21 09:44:25 -04'00'

Armando F. Alvarez
Professional Surveyor & Mapper #5126
State of Florida
Not Valid unless Signed

+ SITE INFORMATION

OWNER	DMG INVESTMENT TRUST LLC
FOLIO NUMBER	08-2122-018-0200
LOT AREA	10,575 Sq Ft
ADDRESS	13600 NW 17 AVE
LEGAL DESCRIPTION	PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 POR LOTS 39 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11 5FT N 29 DEG E50FT E88 52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

+ LOCATION



+ ZONING DATA:

ZONING: R-1

LOT SIZE	10,575 Sq Ft		
	REQUIRED	EXISTING	PROPOSED
LOT COVERAGE	35%	----	2,252 Sq / 22%
SETBACKS			
	REQUIRED	EXISTING	PROPOSED
FRONT	25 Ft	25 Ft	25 Ft
INTERIOR SIDE	7.5 Ft	------	23'-0 Ft
SIDE FACING STREET	15 Ft	------	25'-0" Ft
REAR	25 Ft	------	30'-1" Ft

+ SITE INVESTIGATION NOTE

EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF WORK: THE BIDDER IS REQUIRED, BEFORE SUBMITTING HIS PROPOSAL, TO VISIT THE SITE OF THE PROPOSED WORK AND FAMILIARIZE HIM OR HERSELF WITH THE NATURE AND EXTENT OF THE WORK AND ANY LOCAL CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND EQUIPMENT, MATERIALS AND LABOR REQUIRED THEREFORE. SINCE THE WORK INVOLVES NEW AND/OR EXISTING BUILDINGS, SYSTEMS AND FACILITIES, SPECIAL CONSIDERATION SHALL BE GIVEN TO EXAMINATION OF WORKING CONDITIONS, NEW FACILITIES AND ALL BUILDING STRUCTURES FAMILIARIZE TO HIMSELF WITH ALL EXISTING CONDITIONS SLIGHT VARIATION OF ROUTING AND OR CONSTRUCTIONS SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES THESE VARIATIONS ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHENEVER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITY ASSUMED UNDER THIS CONTRACT.

+ ALTERATION PROJECT PROCEDURES

REQUIREMENTS INCLUDED

COORDINATE WORK OF TRADES AND SCHEDULE ELEMENTS OF ALTERATIONS AND RENOVATION WORK BY PROCEDURES AND METHODS TO EXPEDITE COMPLETION OF THE WORK.

CUT, MOVE OR REMOVE ITEMS AS NECESSARY TO PROVIDE ACCESS OR TO ALLOW ALTERATIONS AND NEW WORK TO PROCEED. INCLUDE SUCH ITEM AS

a. REPAIR OR REMOVAL OF HAZARDOUS OR UNSAFETY CONDITIONS.

b. REMOVAL OF ABANDONED ITEMS AND ITEMS SERVING NO USEFUL PURPOSE, SUCH AS ABANDONED PIPING, CONDUIT, AND WIRING.

c. REMOVAL OF UNSUITABLE OR EXTRANEOUS MATERIALS NOT MARKED FOR SALVAGE, SUCH AS ABANDONED EQUIPMENT AND DEBRIS INCLUDING ROTTED WOOD, RUSTED METALS AND DETERIORATED CONCRETE.

ALTERATIONS AND CONNECTIONS OF NEW CONTRUCTION TO EXISTING CONSTRUCTION OCCUR AT DUST SENSITIVE AREAS EXECUTE ALL MEASURES TO COMPLETELY CONTROL AND SEPARATE DUST FROM EXISTING AREA AND EQUIPMENT.

+ TERMITE PROTECTION

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

+ GENERAL SCOPE OF WORK

WORK ENCOMPASSED UNDER THIS SET OF CONTRACT DOCUMENTS INCLUDES THE CONSTRUCTION OF THE NEW ONE STORY RESIDENTIAL HOUSE.

- NEW CONSTRUCTION

GROUND FLOOR _____ 1,100.00 Sq Ft

+ NOTE

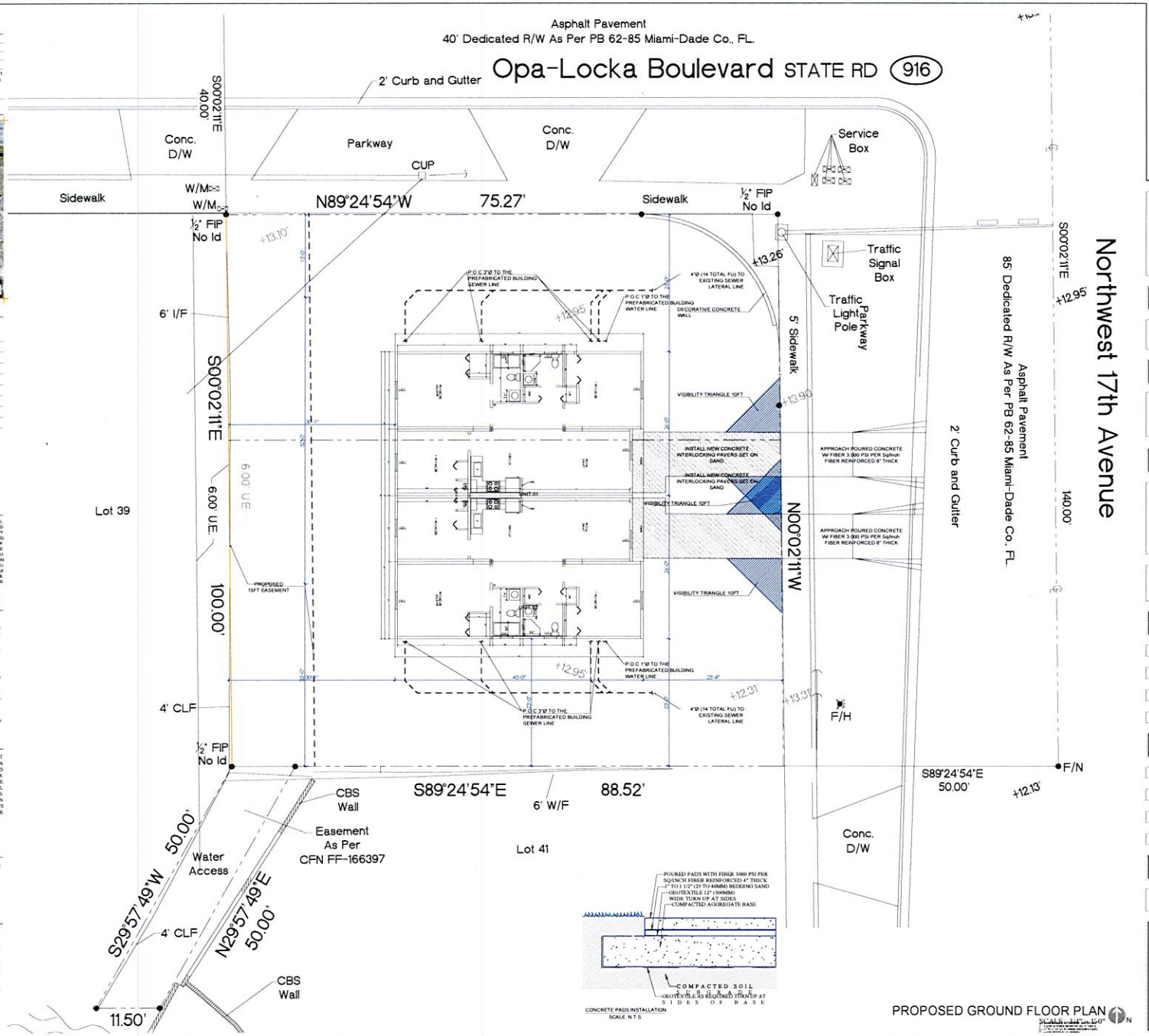
CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF THE PROJECT.

CONTRACTOR TO PROVIDE ALL THE COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING PROJECT, EVEN IF NOT INCLUDED IN THE CONSTRUCTION DOCUMENTS.

ALTHOUGH IT IS UNDERSTOOD THAT THE CONTRACTOR IS NOT A LICENSED DESIGN PROFESSIONAL, THE CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND LOCATIONS OF SYSTEMS WITH ARCHITECTURE AND ALL DISCIPLINES INCLUDED IN THESE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR AGREED TO PROMPTLY ADVISE THE ARCHITECT OF ANY NONCONFORMITY OBSERVED BY, OR MADE KNOWN TO, THE CONTRACTOR.

REFER TO "CONSTRUCTION NOTES" ON SHEET A0 02 FOR FURTHER INSTRUCTIONS



PROPOSED GROUND FLOOR PLAN

SCALE: 1/4" = 1'-0"

nandezD+D
design+development

PROJECT

13600 NW 17 AVE

OWNER

DMG INVESTMENT TRUST LLC

ARCHITECT

NANDEZ Design+Development
2223 SW 13Th AVE
MIAMI, FL 33145
tel 786 703 7704
info@nandezdd.com
AA 26002732
IB 26001520

ARCHITECT OF RECORD
RALPH PUIG JR
FL ARCHITECT REG. #
AR 0012526

SEAL

REWORKS

	1
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REVISIONS

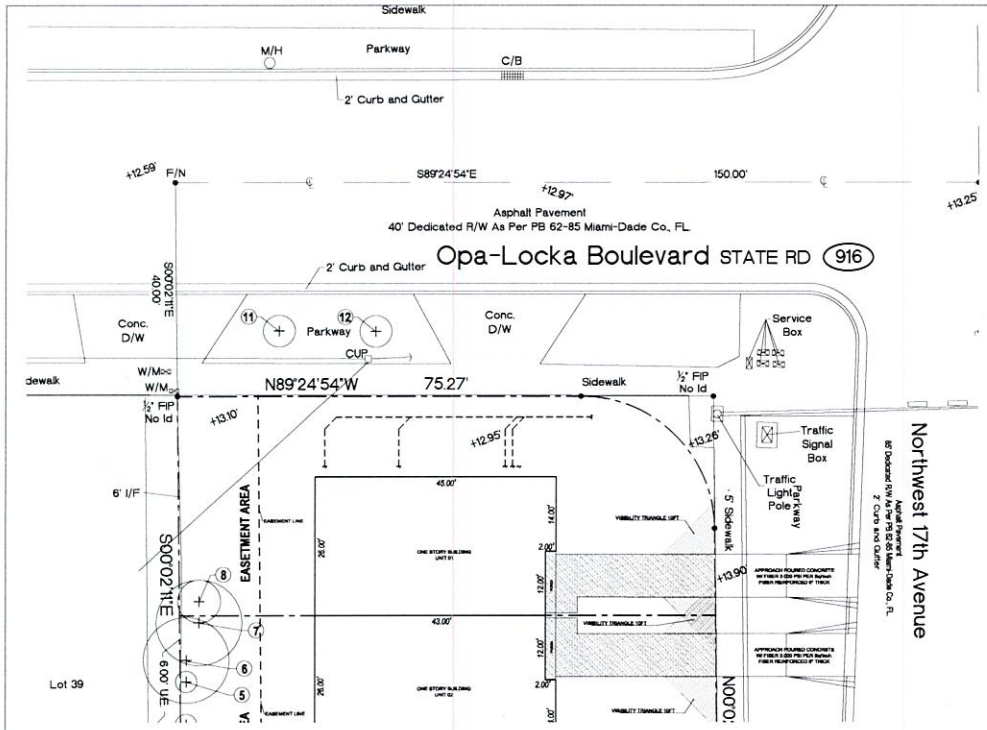
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INFORMATION

PROPOSED SITE PLAN

DATE: 10/11/2021
Scale: AS SHOWN
Job No.: 2021/
Drawn by: RP
Checked by: RP Jr.

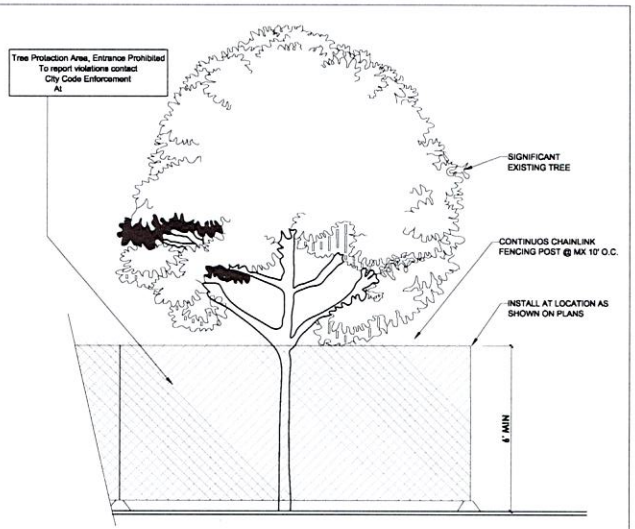
Sheet A101



EXISTING TREE DISPOSITION (UNIT 01)

SCALE: 3/32"=1'-0"

N



1. MINIMUN SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING AND COVERED WITH SOIL AS SOON AS POSSIBLE.
3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.
4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE

TREE PROTECTION FENCING DETAIL
(for public and private trees)

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:09:45 -04'00'

STATE OF FLORIDA — RALPH PUIG JR — AR0012528 — REGISTERED ARCHITECT

NOTES;
- -THE APPROXIMATE LOCATION, SIZE AND CONDITIONS OF THE EXISTING TREES/PALMS WITHIN THE PROJECT LIMITS HAS BEEN COLLECTED FROM THE EXISTING ARBORIST REPORT PREPARED BY PEDRO J. PARTIDAS CORDERO, CERTIFIED ISA ARBORIST ISA FL-9963A, PH: 786-218-8478
- -EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION (SEE DETAIL 1)
- -CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT PRIOR TO THE REMOVAL OF TREES / PALMS PROPOSED TO BE REMOVED
- -CONTRACTOR TO REMOVE ALL EXISTING SHRUBS AND GROUNDCOVERS UNLESS NOTED IN LANDSCAPE PLAN AS EXISTING TO REMAIN

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
8	*Ficus benjamina*	weeping fig	2	25	4	Poor	2	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN
11	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	6	Good	4	YES	REMAIN
12	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	8	Good	4	YES	REMAIN

NOTE
The trees #2, #3, #4, #5, #6, #7 & #8 shall be remain because they are in the Easement Area.



LOCATION MAP

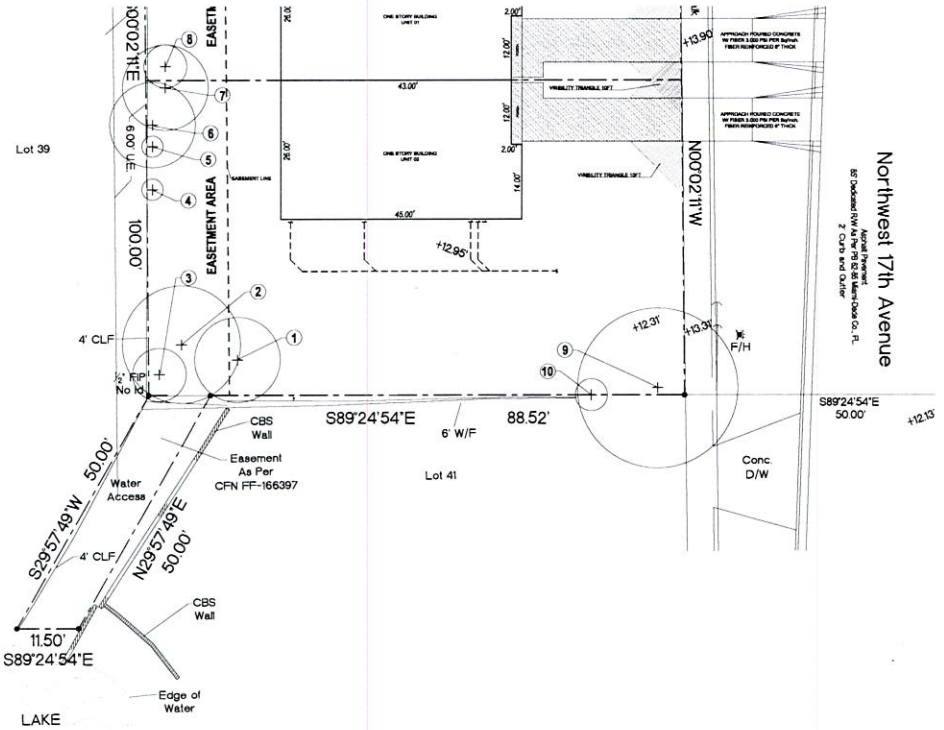
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LATITUDE ONE INTL. BUSINESS CTR.
175 SW 7th ST. / Suite 1712
Miami, FL 33130.
305 - 731 - 1770 phone
FL. Architect Registration: AR 0012528

project	LANDSCAPE PLANNING
property ID	08-2122-018-0200
owner	DMG INVESTMENTS TRUST LLC
address	13600 NW 17th AVENUE OPA-LOCKA BOULEVARD
revisions	rework #1 rework #2 rework #3 rework #4 rework #5 rework #6 revision #1 revision #2 revision #3 revision #4 revision #5 revision #6
architect	Ralph Puig Jr. AR:12528
seal	
model	

EXISTING TREE DISPOSITION UNIT 01

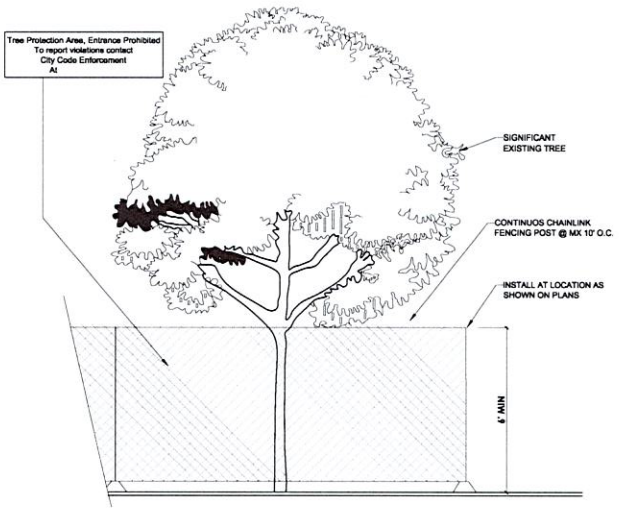
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scale: as shown
checked by: RP
sheet: L-001

FILENAME: 1300 NW 17 AVENUE-Opa Locka FL\A\CAD\Unit
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EXISTING TREE DISPOSITION UNIT 02

SCALE: 3/32"=1'-0"



1. MINIMUM SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
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TREE PROTECTION FENCING DETAIL
(for public and private trees)

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LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN

NOTE
The trees #2, #3, #4, #5, #6 & #7 shall remain because they are located within the Easement Area.

Ralph Puig
Digitally signed by Ralph Puig
Date: 2023.08.24 09:07:21 -04'00'

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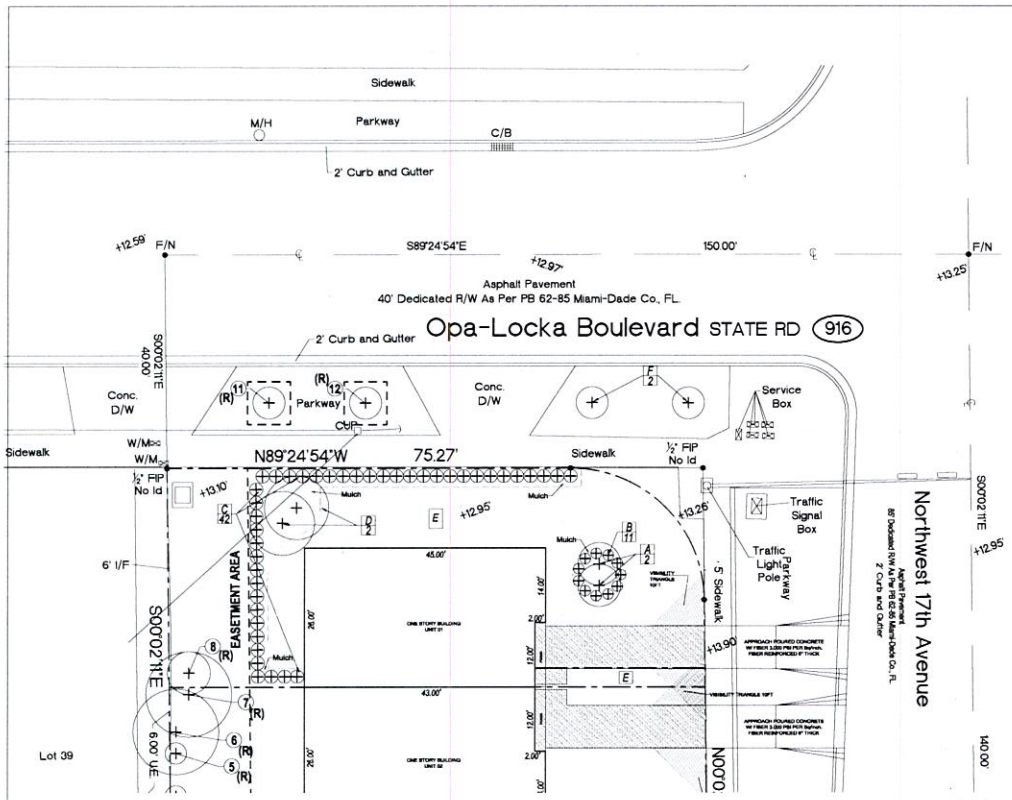
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175 SW 7th ST. / Suite 1712
Miami, FL 33130.
305 - 731 - 1770 phone
FL. Architect Registration: AR 0012528

project: LANDSCAPE PLANNING
property ID:
owner:
address: 13600 NW 17th AVENUE
OPA-LOCKA BOULEVARD
reworks: rework #1 / rework #2 / rework #3 / rework #4 / rework #5 / rework #6
revisions: revision #1 / revision #2 / revision #3 / revision #4 / revision #5 / revision #6
architect:
seal:
initials:

EXISTING TREE DISPOSITION UNIT 02

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-001

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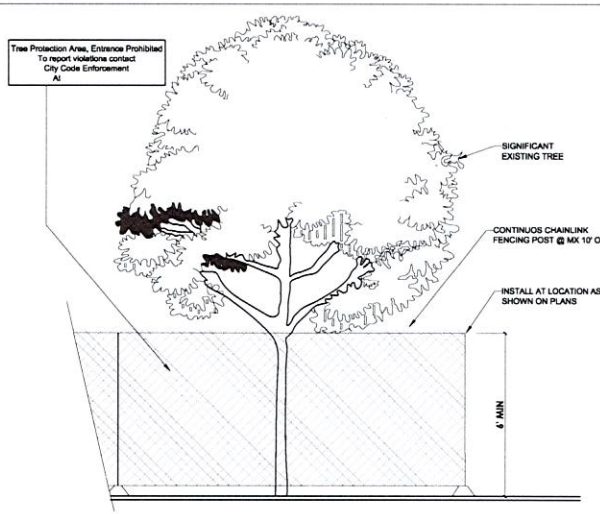
PROPOSED LANDSCAPE PLAN (UNIT 01)

SCALE: 3/32"=1'-0"

LEGEND	
MARK	DESCRIPTION
⊕	TREE OR PALM NUMBER
[ ]	TREE PROTECTION FENCE
X (R)	EXISTING TREE TO REMAIN
X X	TREE CODE QTY. OF TREES

LANDSCAPE LEGEND / PROPOSED

CODE	SCIENTIFIC NAME	COMMON NAME	QTY	DROUGHT TOLERANCE	NATIVE	SPECIFICATIONS	CONTAINER SIZE	SPACING
PALMS								
A	*Phoenix roebelenii*	pygmy date palm	2	MEDIUM	NO	7' HT. x 6' SPR	F.G.	AS SHOWN
D	*Veitchia montgomeriana*	montgomery palm	2	MEDIUM	NO	14' HT. x 12' SPR	F.G.	AS SHOWN
SHRUBS & GROUNDCOVERS								
B	*Hamelia patens*	firebush	11	MEDIUM	YES	24"' HT. x 24" SPR	3 GAL.	30" O.C
C	*Clusia flava*	small leaf clusia	42	HIGH	YES	36" HT. x 30" SPR	7 GAL.	30" O.C
E	*stenotaphrum secundatum*	St. Augustine grass	1351 SQF		YES	staggerd panels		
TREES								
F	*Conocarpus erectus var. sericeus*	silver buttonwood tree	2	MEDIUM	YES	7' HT. x 6' SPR	F.G.	AS SHOWN



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TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME
8 (R)	*Ficus benjamina*	weeping fig

NOTE
The tree #8 shall remain because it is in the Easement Area.

CALCULATIONS AREAS

ZONING DISTRICT: R-1
LOT AREA ——————3967 SF ——0.091 ACRES
EASEMENT AREA ——————615 SF
NET LOT AREA ——————3967 - 615 = 3352 SF
NET OPEN SPACE : 2206 SF

TREE
PROVIDED IN THE LOT ——— 4
EXISTING STREET TREE ——— 2
STREET TREE PROVIDED——— 2
TOTAL TREES——— 8

SHRUBS
PROVIDED ——————————53

IRRIGATION PLAN PROVIDED: AUTO IRRIGATION

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:05:41 -04'00'

STATE OF FLORIDA — RALPH PUIG JR — AR0012528 — REGISTERED ARCHITECT



LOCATION MAP

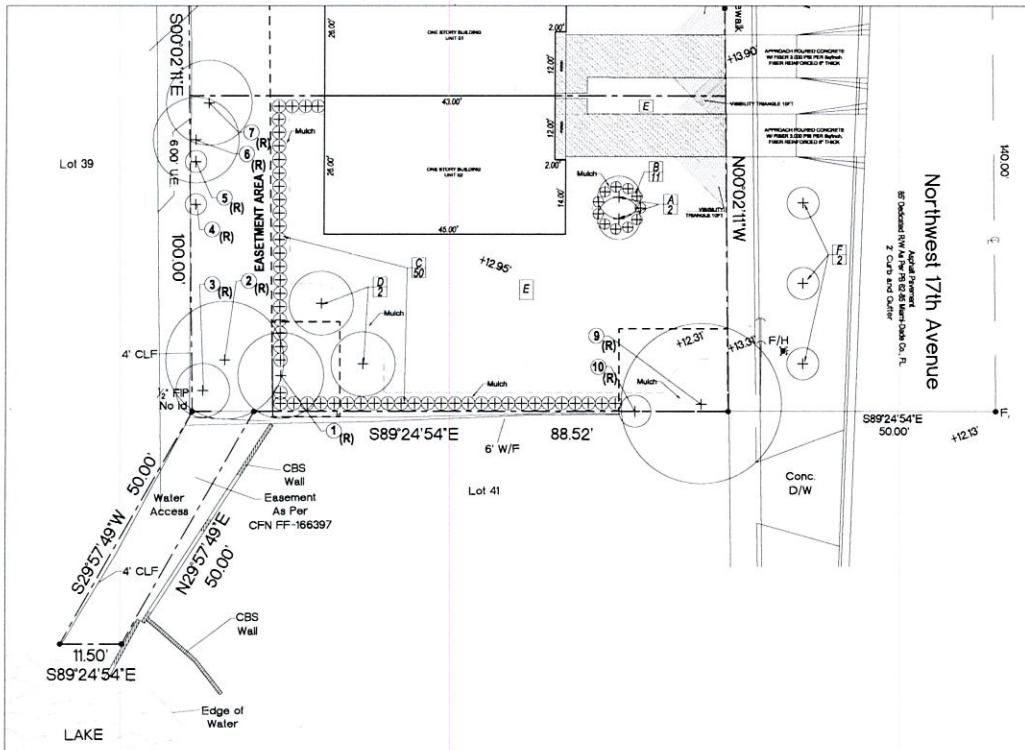
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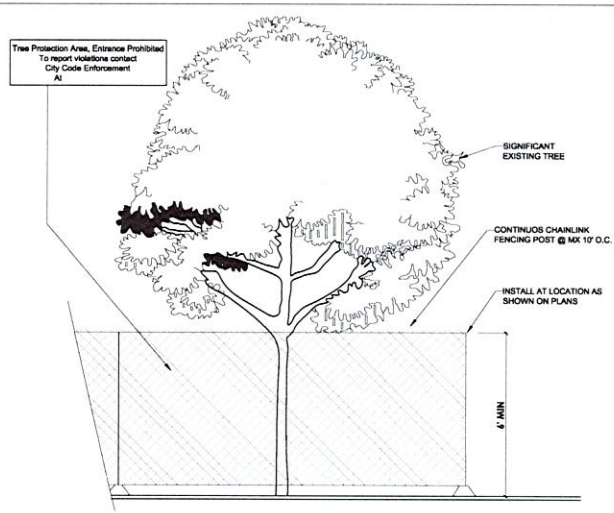
project	LANDSCAPE PLANNING
property ID	08-2122-018-0200
owner	DMG INVESTMENTS TRUST LLC
address	13600 NW 17th AVENUE OPA-LOCKA BOULEVARD
reworks	rework #1 rework #2 rework #3 rework #4 rework #5 rework #6
revisions	revision #1 revision #2 revision #3 revision #4 revision #5 revision #6
architect	Ralph Puig Jr. AR:12528
seal	
model	

PROPOSED LANDSCAPE PLAN UNIT 01

date:	08/10/2023
scale:	as shown
checked by:	RP
sheet	L-002

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TREE PROTECTION FENCING DETAIL
(for public and private trees)

LEGEND	
MARK	DESCRIPTION
⊕	TREE OR PALM NUMBER
[ ]	TREE PROTECTION FENCE
X (R)	EXISTING TREE TO REMAIN
X / X	TREE CODE / QTY. OF TREES

PROPOSED LANDSCAPE PLAN (UNIT 02)

SCALE: 3/32"=1'-0"

N

LANDSCAPE LEGEND / PROPOSED

CODE	SCIENTIFIC NAME	COMMON NAME	QTY	DROUGHT TOLERANCE	NATIVE	SPECIFICATIONS	CONTAINER SIZE	SPACING
PALMS								
A	*Phoenix roebelenii*	pygmy date palm	2	MEDIUM	NO	7' HT. x 6' SPR	F.G.	AS SHOWN
D	*Veitchia montgomeriana*	montgomery palm	2	MEDIUM	NO	14' HT. x 12' SPR	F.G.	AS SHOWN
SHRUBS & GROUNDCOVERS								
B	*Hamelia patens*	firebush	11	MEDIUM	YES	24"' HT. x 24" SPR	3 GAL.	30" O.C
C	*Clusia flava*	small leaf clusia	50	HIGH	YES	36" HT. x 30" SPR	7 GAL.	30" O.C
E	*stenotaphrum secundatum*	St. Augustine grass	2633 SQF		YES	staggerd panels		
TREES								
F	*Conocarpus erectus var. sericeus*	silver buttonwood tree	3	MEDIUM	YES	7' HT. x 6' SPR	F.G.	AS SHOWN

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
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7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
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NOTE
The trees #2, #3, #4, #5, #6 & #7 shall remain because they are located within the Easement Area.

CALCULATIONS AREAS

ZONING DISTRICT: R-1
LOT AREA : ——————6399 SF ——0.14 ACRES
EASEMENT AREA ——— 1385 SF
NET LOT AREA——6399 SF - 1385 SF = 5014 SF
NET OPEN SPACE : 3878 SF

TREE
PROVIDED IN THE LOT ——— 4
STREET TREE PROVIDED—— 3
TOTAL TREES——— 7

SHRUBS
PROVIDED ——————————61

IRRIGATION PLAN PROVIDED: AUTO IRRIGATION

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:12:22 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT



LOCATION MAP

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reworks	
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	rework #4
	rework #5
	rework #6

revisions	
	revision #1
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	revision #4
	revision #5
	revision #6

architect:
seal:
model:

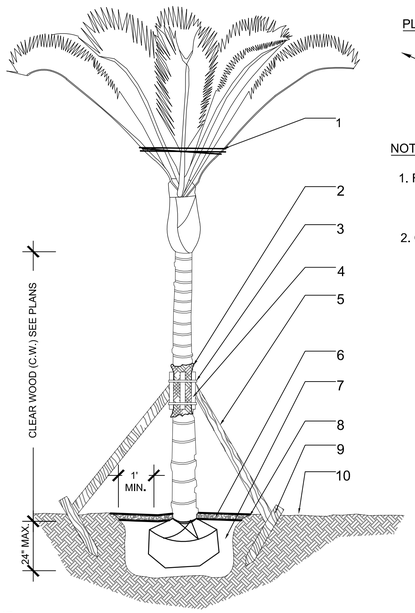
PROPOSED LANDSCAPE PLAN UNIT 02

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-002

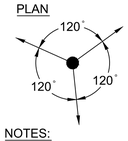
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GENERAL NOTES

1. Before construction begins, the Landscape Contractor is responsible for locating all underground utilities and must avoid damaging any services during construction. If any damage occurs by fault of the Contractor, the necessary repairs must take place at the Landscape Contractor's expense and under the supervision of the Owner's representative.
2. All proposed trees and plant materials shall be graded as Nursery Grade Florida No. 1 or better as outlined by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry "Grades and standards for Nursery Plants", most current edition. All planting shall be done in accordance with the Florida Nurserymen's and Grower's Association approved practices.
3. In addition to these requirements the Landscape Contractor shall comply with all local landscape codes and requirements as part of this base bid and contract in order to satisfy the review and approval of the governing agency.
4. All screening hedges shall be planted and maintained in a way that they form a continuous visual screen. Screening hedges at VUA to be maintained at a minimum height of thirty (30) inches.
5. All planting beds shall be excavated to a minimum depth of twenty-four (24") inches and backfilled with a suitable soil. All plant material shall be planted in planting soil that is delivered to the site in a loose, clean and friable condition. The planting soil shall be the approximate proportions as follows: 50% sand and 50% organic material consisting of native peat, well-decomposed sawdust, leaf mold and top soil. It shall provide a good pliable and thoroughly mixed medium with adequate aeration, drainage and water-holding capacity. It shall also be free of all extraneous debris, such as roots, stones, weeds, etc.
6. All trees/palms and shrubs shall be fertilized with "Agriform" 20-10-5 planting tablets as per the manufacturers specifications at the time of installation and prior completion of pit backfilling also in conjunction with note #5. Tablets to be placed uniformly around the root mass at a depth that is between the middle and bottom of root mass at an application rate of: One (1) - 21 gram tablet for 1 gal container, two (2)- tablets for 3 gal container, three (3)- tablets for 5 gal container, four (4)-tablets for 7 gal container, three (3)-tablets for each 1/2 inch of tree caliper, and seven (7) tablets for palms. Ground Cover areas shall receive fertilization with "Ozmocote" time release fertilizer as per manufacturer's specification.
7. All plant beds shall receive a 3" layer of organic mulch, which is to be watered-in after installation. Mulch should be at least six (6) inches away from any portion of a structure or tree trunk and three (3) inches away from the base of shrubs. Only environmental friendly mulch shall be approved, Cypress mulch shall not be accepted.
8. All plant material shall be thoroughly watered in at the time of planting and until landscape material is established. No dry material shall be permitted.
9. The plant material schedule is presented for the convenience of the Landscape Contractor. In the event of a discrepancy between the plan and the plant key, the plan shall prevail.
10. Plants shall meet size, container, and spacing specifications. Any material not meeting specifications shall be removed and replaced at the contractor's expense.
11. All tree and shrub locations shall be approved by Landscape Architect prior to planting.
12. The Landscape Contractor shall grade planting beds, as required, to provide positive drainage and promote optimum plant growth.
13. The Landscape Contractor shall be responsible for examining fully both the site and bid documents. Discrepancies in the documents or the actual site conditions shall be reported to the Landscape Architect in writing at the time of bidding or discovery. No account shall be made after contract completion for failure by the Landscape Contractor to report such condition or for errors on the part of the Landscape Contractor at the time of bidding.
14. The Landscape Contractor shall be responsible for securing all necessary applicable permits and licenses to perform the work set forth in this plan set and the specifications.
15. Plant material shall be bid as specified unless unavailable, at which time the Landscape Architect shall be notified in writing of intended changes.
16. All questions concerning the plan set and/or specifications shall be directed to the Landscape Architect.
17. There shall be no additions, deletions or substitutions without written approval of the Landscape Architect.
18. The Landscape Contractor shall guarantee, in writing, plant survivability. Trees and palms for twelve (12) months, shrubs and groundcovers for ninety (90) days and sod for sixty (60) days from final acceptance by the Owner or Owner's representative.
19. All dimensions to be field-checked by the Landscape Contractor prior to landscape material installation. Discrepancies shall be reported immediately to the Landscape Architect.
20. All materials must be as specified on the landscape plan. If materials or labor do not adhere to specifications, they will be rejected by the Landscape Architect with proper installation carried out by the Landscape Contractor at no additional cost.
21. Existing sod shall be removed as necessary to accommodate new plantings
22. All existing trees on site shall be protected from damage during construction - See existing tree protection fence detail.
23. Any existing landscape and hardscape areas that are unnecessarily disturbed during the landscape installation shall be restored to original conditions by the Landscape Contractor.
24. The Landscape Contractor will be responsible for the collection, removal, and proper disposal of any and all debris generated during the installation of this project.
25. All landscape areas to have a positive drainage away from buildings and structures. Finished grade of landscape areas to be at or below the grade of adjacent sidewalks, slabs or VUA
26. All shade and medium trees installed within 5' of a public infrastructure shall utilize a root barrier system.



PLAN



NOTES:

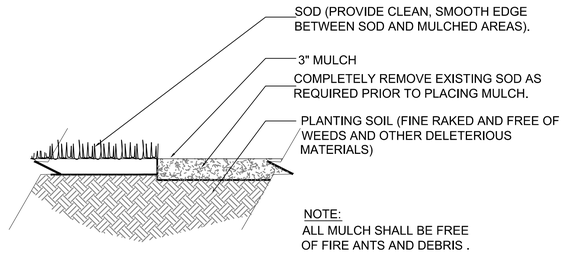
1. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT
2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

LEGEND

1. PRUNE AND TIE FRONDS WITH HEMP TWINE.
2. TWO LAYERS OF BURLAP TO PROTECT TRUNK.
3. TWO STEEL BANDS TO SECURE BATTONS.
4. THREE 2" X 4" X 18" WOOD BATTONS.
5. 3-2" X 4" LUMBER POLE BRACES. NAIL (DRILL AND NAIL IF NECESSARY) TO BATTONS & 2" X4" STAKES. FLAG AT MIDPOINT.
6. 3" MIN. MULCH- SEE SPECIFICATIONS.
7. PREPARED PLANTING SOIL AS SPECIFIED. PALMS SHALL BE PLANTED WITH THE TOP OF ROOTBALL AT FINISHED GRADE.
8. BERM SOIL TO HOLD WATER.
9. 2" X 4" X 3' WOOD STAKES.
10. FINISH GRADE

SMALL PALM

SECTION SCALE: N.T.S



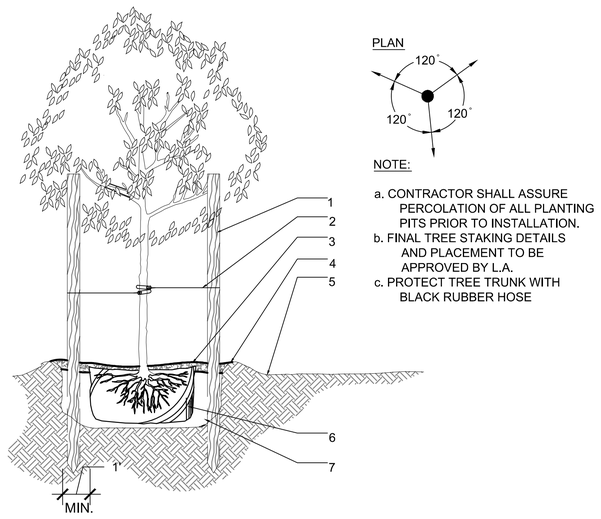
NOTE:
ALL MULCH SHALL BE FREE OF FIRE ANTS AND DEBRIS .

MULCH

SECTION SCALE: N.T.S

NOTES:

1. ROOT BARRIERS SHALL BE INSTALLED AT ALL TREES/PALMS THAT ARE PLANTED WITHIN FIVE (5) FEET OF UNDERGROUND UTILITIES OR UTILITY EASEMENT. SEE DETAIL #4 ON SHEET L-03.
2. ALL LANDSCAPE AREAS SHALL BE PROVIDED WITH A FULLY AUTOMATICALLY OPERATED IRRIGATION SYSTEM. IRRIGATION SYSTEM SHALL PROVIDE COMPLETE COVERAGE OF ALL PLANT MATERIALS. THIS SYSTEM SHOULD HAVE RAIN SENSOR AND SHOULD AUTOMATICALLY SHUT OFF WHEN RAINING.
3. WITHIN VISIBILITY TRIANGLES, LANDSCAPE SHALL BE MAINTAIN TO PROVIDE CLEAR VISIBILITY WITHOUT OBSTRUCTION FROM AN AREA BETWEEN TWO AND HALF (2 1/2) FEET AND SEVEN (7) FEET ABOVE GRADE.
4. TREE PROTECTION FENCE MIGHT BE TEMPORARILY ADJUSTED AT TREES #1 AND #2 TO ALLOW FOR THE CONSTRUCTION OF THE HARDCAPE AREAS AND THE BUILDING.



PLAN

NOTE:

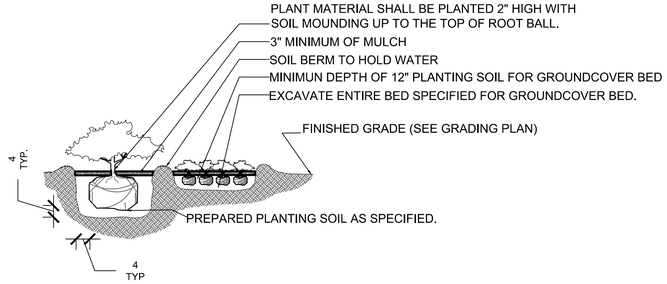
a. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
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c. PROTECT TREE TRUNK WITH BLACK RUBBER HOSE

LEGEND

1. THREE 2"x4"x8" STAKES SPACE EVENLY AROUND TREE PAINTED BROWN.
2. #10 GUAGE WIRE.
3. 3" MINIMUM OF MULCH.
4. SOIL BERM TO HOLD WATER.
5. FINISHED GRADE (SEE GRADING PLAN).
6. B&B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
7. PREPARED PLANTING SOIL AS SPECIFIED.

SMALL TREE

SECTION SCALE: N.T.S



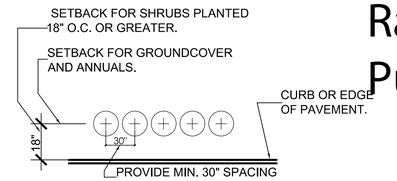
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NOTE: WHEN GROUNDCOVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE EXCAVATED TO RECEIVE PLANTING SOIL & PLANT MATERIAL, UNLESS NOTED OTHERWISE.

SHRUBS & GROUNCOVERS

SECTION SCALE: N.T.S



TYPICAL PLANT SPACING

SECTION SCALE: N.T.S



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE | PLANNING | INTERIOR DESIGN

LATITUDE ONE INT'L. BUSINESS CTR.
175 SW 7th ST. / Suite 1712
Miami, FL 33130.
305•731•1770 phone
FL. Architect Registration: AR 0012528

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reworks	rework #1, rework #2, rework #3, rework #4, rework #5, rework #6
revisions	revision #1, revision #2, revision #3, revision #4, revision #5, revision #6
architect	Ralph Puig Jr. AR:12528
seal	
model	

Ralph Puig
Digitally signed by Ralph Puig
Date: 2023.08.24 09:13:47 -04'00'

STATE OF FLORIDA
RALPH PUIG JR
AR0012528
REGISTERED ARCHITECT

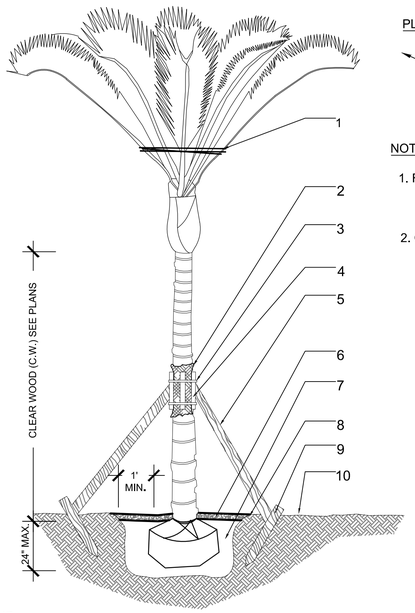
LANDSCAPE PLAN UNIT 01

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scale: as shown
checked by: RP
sheet L-003

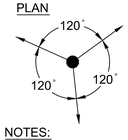
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THE ARCHITECTURAL DESIGN AND DETAIL DRAWINGS FOR THIS BUILDING AND/OR OVERALL PROJECT ARE THE LEGAL PROPERTY OF AND ALL RIGHTS ARE RESERVED BY THE ARCHITECT. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY ARCHITECT.
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GENERAL NOTES

1. Before construction begins, the Landscape Contractor is responsible for locating all underground utilities and must avoid damaging any services during construction. If any damage occurs by fault of the Contractor, the necessary repairs must take place at the Landscape Contractor's expense and under the supervision of the Owner's representative.
2. All proposed trees and plant materials shall be graded as Nursery Grade Florida No. 1 or better as outlined by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry "Grades and standards for Nursery Plants", most current edition. All planting shall be done in accordance with the Florida Nurserymen's and Grower's Association approved practices.
3. In addition to these requirements the Landscape Contractor shall comply with all local landscape codes and requirements as part of this base bid and contract in order to satisfy the review and approval of the governing agency.
4. All screening hedges shall be planted and maintained in a way that they form a continuous visual screen. Screening hedges at VUA to be maintained at a minimum height of thirty (30) inches.
5. All planting beds shall be excavated to a minimum depth of twenty-four (24") inches and backfilled with a suitable soil. All plant material shall be planted in planting soil that is delivered to the site in a loose, clean and friable condition. The planting soil shall be the approximate proportions as follows: 50% sand and 50% organic material consisting of native peat, well-decomposed sawdust, leaf mold and top soil. It shall provide a good pliable and thoroughly mixed medium with adequate aeration, drainage and water-holding capacity. It shall also be free of all extraneous debris, such as roots, stones, weeds, etc.
6. All trees/palms and shrubs shall be fertilized with "Agriform" 20-10-5 planting tablets as per the manufacturers specifications at the time of installation and prior completion of pit backfilling also in conjunction with note #5. Tablets to be placed uniformly around the root mass at a depth that is between the middle and bottom of root mass at an application rate of: One (1) - 21 gram tablet for 1 gal container, two (2)- tablets for 3 gal container, three (3)- tablets for 5 gal container, four (4)-tablets for 7 gal container, three (3)-tablets for each 1/2 inch of tree caliper, and seven (7) tablets for palms. Ground Cover areas shall receive fertilization with "Ozmocote" time release fertilizer as per manufacturer's specification.
7. All plant beds shall receive a 3" layer of organic mulch, which is to be watered-in after installation. Mulch should be at least six (6) inches away from any portion of a structure or tree trunk and three (3) inches away from the base of shrubs. Only environmental friendly mulch shall be approved, Cypress mulch shall not be accepted.
8. All plant material shall be thoroughly watered in at the time of planting and until landscape material is established. No dry material shall be permitted.
9. The plant material schedule is presented for the convenience of the Landscape Contractor. In the event of a discrepancy between the plan and the plant key, the plan shall prevail.
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PLAN



NOTES:

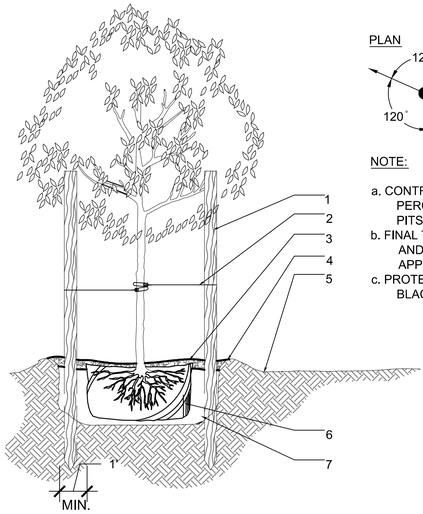
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LEGEND

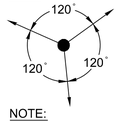
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6. 3" MIN. MULCH- SEE SPECIFICATIONS.
7. PREPARED PLANTING SOIL AS SPECIFIED. PALMS SHALL BE PLANTED WITH THE TOP OF ROOTBALL AT FINISHED GRADE.
8. BERM SOIL TO HOLD WATER.
9. 2" X 4" X 3' WOOD STAKES.
10. FINISH GRADE

SMALL PALM

SECTION SCALE: N.T.S



PLAN



NOTE:

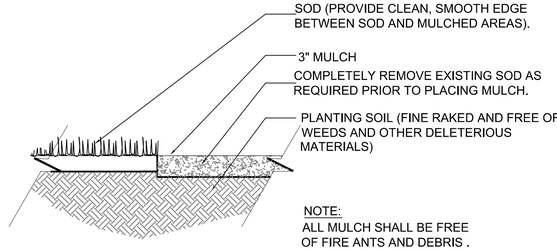
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c. PROTECT TREE TRUNK WITH BLACK RUBBER HOSE

LEGEND

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2. #10 GUAGE WIRE.
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4. SOIL BERM TO HOLD WATER.
5. FINISHED GRADE (SEE GRADING PLAN).
6. B&B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
7. PREPARED PLANTING SOIL AS SPECIFIED.

SMALL TREE

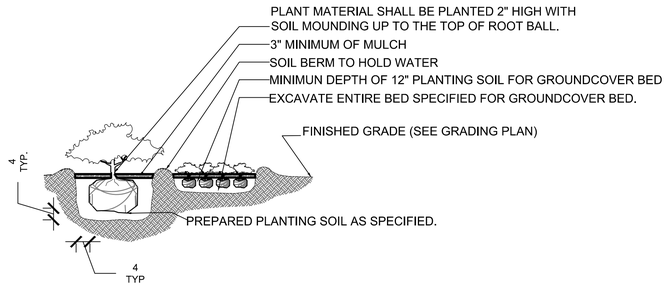
SECTION SCALE: N.T.S



NOTE:
ALL MULCH SHALL BE FREE OF FIRE ANTS AND DEBRIS .

MULCH

SECTION SCALE: N.T.S



NOTE:

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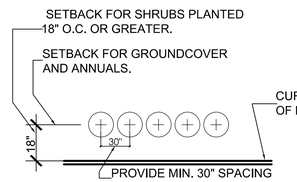
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SHRUBS & GROUNCOVERS

SECTION SCALE: N.T.S

NOTES:

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3. WITHIN VISIBILITY TRIANGLES, LANDSCAPE SHALL BE MAINTAIN TO PROVIDE CLEAR VISIBILITY WITHOUT OBSTRUCTION FROM AN AREA BETWEEN TWO AND HALF (2 1/2) FEET AND SEVEN (7) FEET ABOVE GRADE.
4. TREE PROTECTION FENCE MIGHT BE TEMPORARILY ADJUSTED AT TREES #1 AND #2 TO ALLOW FOR THE CONSTRUCTION OF THE HARDCAPE AREAS AND THE BUILDING.



TYPICAL PLANT SPACING

SECTION SCALE: N.T.S

Ralph Puig
Digitally signed by Ralph Puig
Date: 2023.08.24 09:14:59 -04'00'

STATE OF FLORIDA
RALPH PUIG JR
AR0012528
REGISTERED ARCHITECT



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE | PLANNING | INTERIOR DESIGN

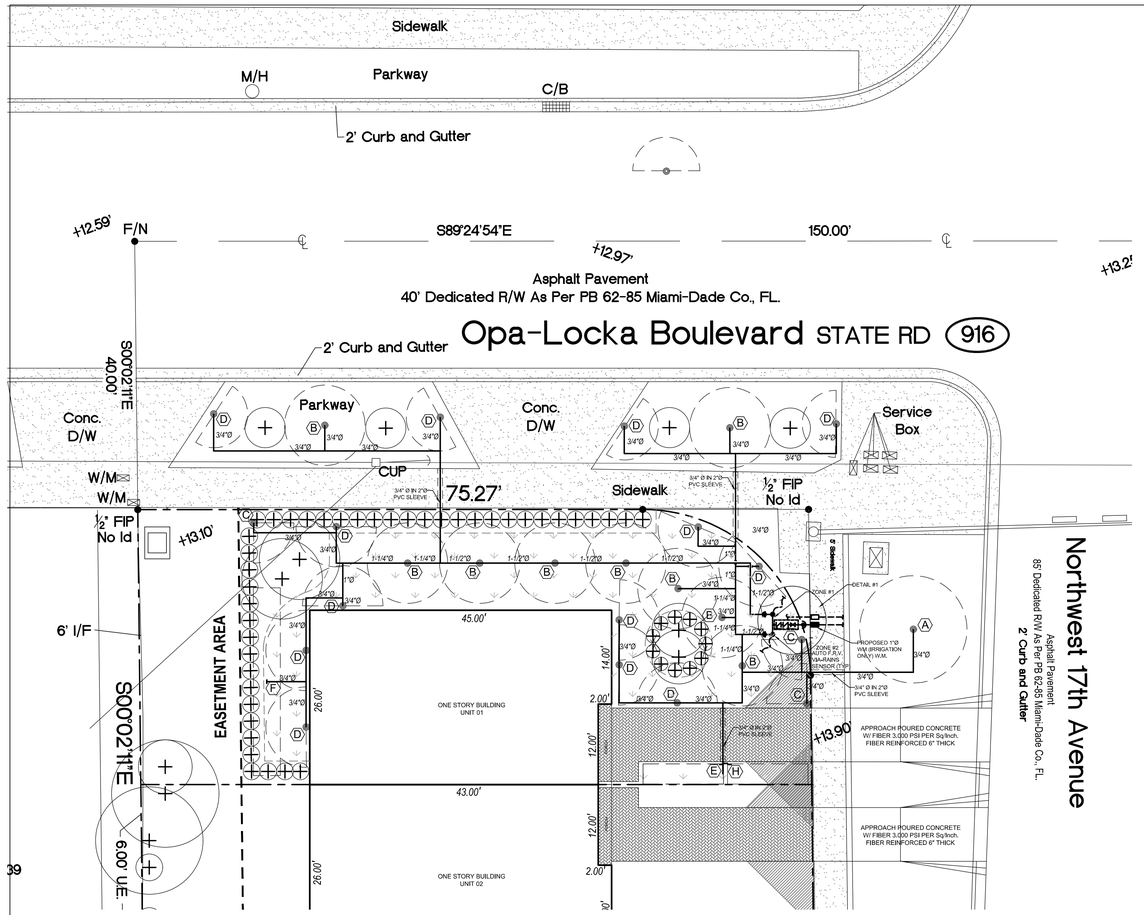
LATITUDE ONE INT'L. BUSINESS CTR.
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Miami, FL 33130.
305•731•1770 phone
FL. Architect Registration: AR 0012528

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property ID	08-2122-018-0200
owner	DMG INVESTMENTS TRUST LLC
address	13600 NW 17th AVENUE OPA-LOCKA BOULEVARD
reworks	rework #1, rework #2, rework #3, rework #4, rework #5, rework #6
revisions	revision #1, revision #2, revision #3, revision #4, revision #5, revision #6
architect	Ralph Puig Jr. AR:12528
seal	
model	

LANDSCAPE PLAN UNIT 02

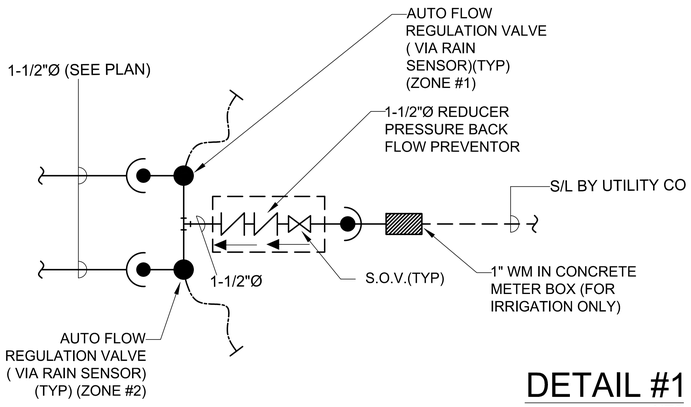
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scale: as shown
checked by: RP
sheet L-003

DATE PLOTTED: Aug 23, 2023 - 8:26pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User
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COPYRIGHT © 2014 Ralph Puig, Architecture / Planning / Interior Design



PROPOSED IRRIGATION PLAN (UNIT 01)

SCALE: 3/32"=1'-0"



DETAIL #1

NTS

GENERAL NOTES:

1. Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.
2. All mainline, lateral line and control wire conduit under paving shall be installed in separate sleeves. Sleeves shall be a minimum of twice (2X) the diameter of the pipe to be sleeved. Main Line shall be installed in with lateral pipe where possible.
3. Install all backflow prevention devices and all piping between the point of connection and the backflow preventer as per local codes.
4. Final location of the backflow preventer and automatic controller shall be approved by the owner's authorized representative.
5. 120 VAC electrical power source at controller location shall be provided by others. The electrical contractor shall make the final connection from the electrical source to the controller.
6. All sprinkler heads shall be set perpendicular to finish grade unless otherwise specified.
7. The irrigation contractor shall flush and adjust all sprinkler heads and valves for optimum spray with minimal overspray onto walks, streets, walls, etc.
8. This design is diagrammatic. All piping, valves, etc., shown within paved areas is for design clarification only and shall be installed in planting areas wherever possible. The contractor shall locate all valves in shrub areas where possible.
9. It is the responsibility of the irrigation contractor to familiarize himself with all grade differences, location of walls, retaining walls, structures and utilities. The irrigation contractor shall repair or replace all items damaged by his work. He shall coordinate his work with other contractors for the location and installation of pipe sleeves through walls, under roadways and paving, etc.
10. Do not willingly install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. such obstructions or differences should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.
11. All sprinkler equipment not otherwise detailed or specified shall be installed as per manufacturer's recommendations and specifications.
12. The irrigation contractor shall install check valves on all heads in areas where finish grade exceeds 4:1, where post valve shut–off draining, of the irrigation head occurs or as directed by the owner's authorized representative.
13. The contractor shall provide 1800 PCS (pressure compensating screens) as necessary to reduce or eliminate overspray onto streets, walks or other areas as directed by the owner's authorized representative.
14. The contractor shall provide 1800 PCS (pressure compensating screens) as necessary to reduce or eliminate overspray onto streets, walks or other areas as directed by the owner's authorized representative.
15. All remote control valves, gate valves, quick couplers, control wire and computer cable pull points shall be installed in approved valves boxes with covers.
16. The installation devices are to be guaranteed for the period of (1) year from the date of final acceptance.

RAIN BIRD HE-VAN SERIES SCHEDULE

ITEM	NOZZLE	PRESSURE (PSI)	RADIUS (FT.)	FLOW G.P.M.	ZONE	QTY	REMARK	TOTAL G.P.M.
B	8 SERIES HE-VAN 360° Arc	20	6'-0"	0.96	#1	5	24° TRAJECTORY	4.80
C	8 SERIES HE-VAN 90° Arc	20	6'-0"	0.24	#2	1	24° TRAJECTORY	0.24
D	8 SERIES HE-VAN 180° Arc	20	6'-0"	0.48	#1	6	24° TRAJECTORY	2.88
F	15CST	20	4 x 28	1.00	#1	1	30° TRAJECTORY	1.00
A	1O SERIES HE-VAN 360° Arc	20	8'-0"	1.46	#2	1	27° TRAJECTORY	1.46
B	8 SERIES HE-VAN 360° Arc	20	6'-0"	0.96	#2	4	24° TRAJECTORY	3.84
C	8 SERIES HE-VAN 90° Arc	20	6'-0"	0.24	#2	2	24° TRAJECTORY	0.48
D	8 SERIES HE-VAN 180° Arc	20	6'-0"	0.48	#2	7	24° TRAJECTORY	3.36
E	15LCS	20	3 x 12	0.40	#2	1	30° TRAJECTORY	0.40
H	15RCS	20	3 x 12	0.40	#2	1	30° TRAJECTORY	0.40
							TOTAL G.P.M.	18.86

TOTAL NOZZLES (ZONA #1) = 13

TOTAL NOZZLES (ZONA #2) = 16



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE I PLANNING I INTERIOR DESIGN
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architect	Ralph Puig Jr. AR:12528
seal	
model	

PROPOSED IRRIGATION PLAN UNIT 01

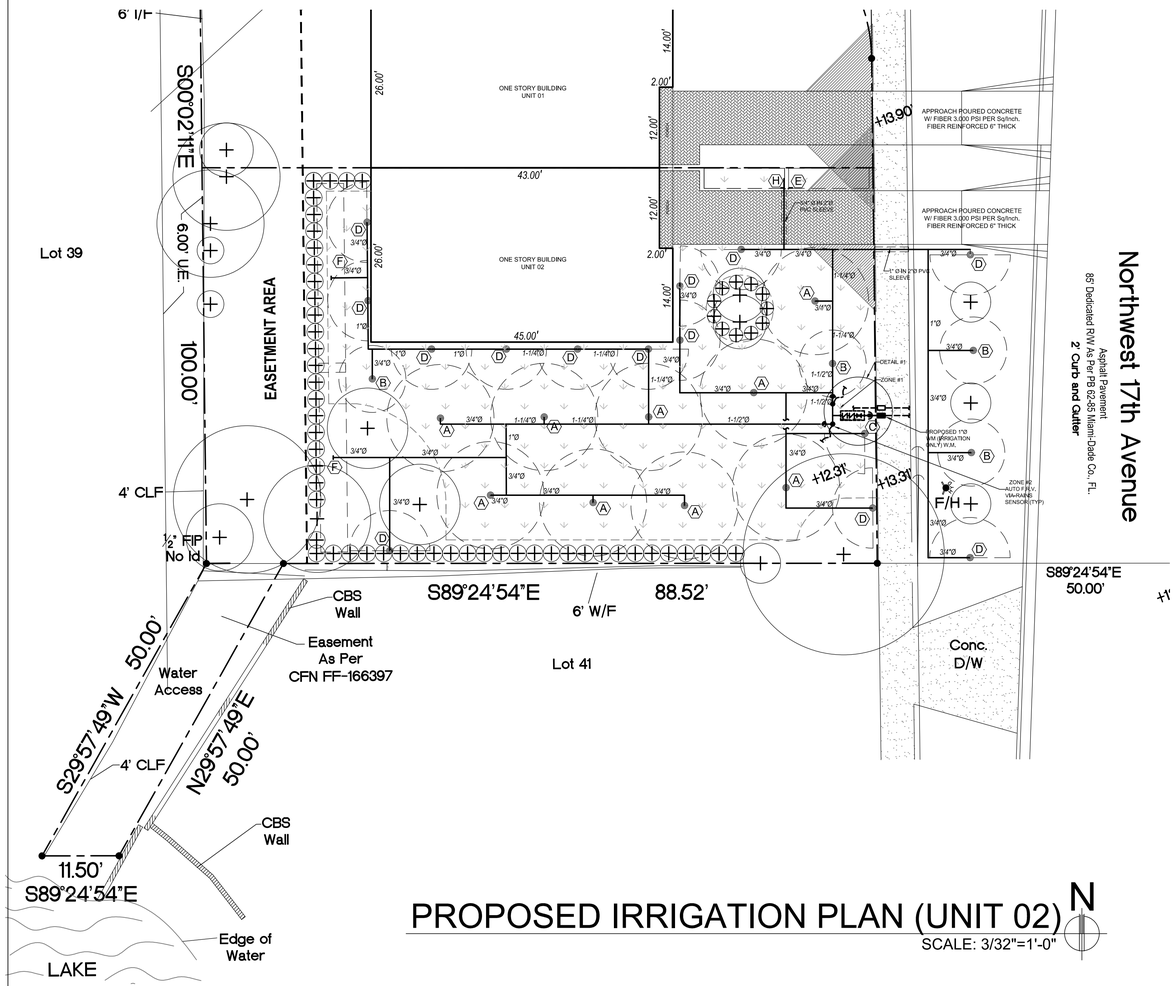
Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:16:16 -04'00'

STATE OF FLORIDA · RALPH PUIG JR. · AR0012528 · REGISTERED ARCHITECT

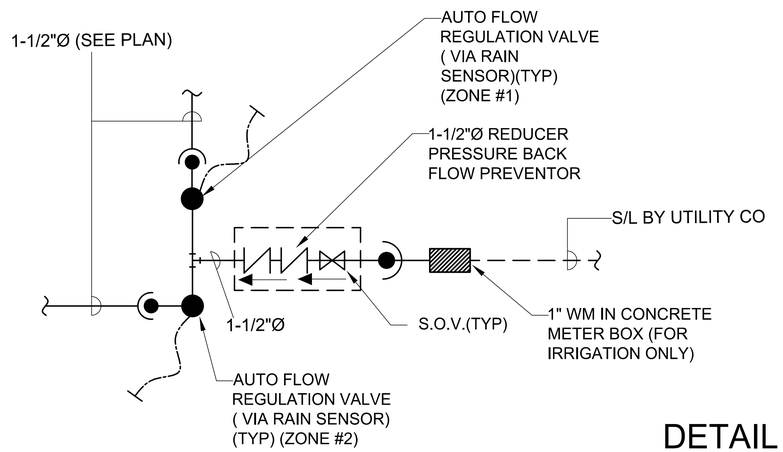
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scale:	as shown
checked by:	RP
sheet	L-004

DATE PLOTTED: Aug 23, 2023 - 8:18pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User
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PROPOSED IRRIGATION PLAN (UNIT 02)

SCALE: 3/32"=1'-0"



DETAIL #1

NTS

GENERAL NOTES:

1. Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.
2. All mainline, lateral line and control wire conduit under paving shall be installed in separate sleeves. Sleeves shall be a minimum of twice (2X) the diameter of the pipe to be sleeved. Main Line shall be installed in with lateral pipe where possible.
3. Install all backflow prevention devices and all piping between the point of connection and the backflow preventer as per local codes.
4. Final location of the backflow preventer and automatic controller shall be approved by the owner's authorized representative.
5. 120 VAC electrical power source at controller location shall be provided by others. The electrical contractor shall make the final connection from the electrical source to the controller.
6. All sprinkler heads shall be set perpendicular to finish grade unless otherwise specified.
7. The irrigation contractor shall flush and adjust all sprinkler heads and valves for optimum spray with minimal overspray onto walks, streets, walls, etc.
8. This design is diagrammatic. All piping, valves, etc., shown within paved areas is for design clarification only and shall be installed in planting areas wherever possible. The contractor shall locate all valves in shrub areas where possible.
9. It is the responsibility of the irrigation contractor to familiarize himself with all grade differences, location of walls, retaining walls, structures and utilities. The irrigation contractor shall repair or replace all items damaged by his work. He shall coordinate his work with other contractors for the location and installation of pipe sleeves through walls, under roadways and paving, etc.
10. Do not willingly install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. such obstructions or differences should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.
11. All sprinkler equipment not otherwise detailed or specified shall be installed as per manufacturer's recommendations and specifications.
12. The irrigation contractor shall install check valves on all heads in areas where finish grade exceeds 4:1, where post valve shut–off draining, of the irrigation head occurs or as directed by the owner's authorized representative.
13. The contractor shall provide 1800 PCS (pressure compensating screens) as necessary to reduce or eliminate overspray onto streets, walks or other areas as directed by the owner's authorized representative.
14. The contractor shall provide 1800 PCS (pressure compensating screens) as necessary to reduce or eliminate overspray onto streets, walks or other areas as directed by the owner's authorized representative.
15. All remote control valves, gate valves, quick couplers, control wire and computer cable pull points shall be installed in approved valves boxes with covers.
16. The installation devices are to be guaranteed for the period of (1) year from the date of final acceptance.

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:11:12 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT

RAIN BIRD HE-VAN SERIES SCHEDULE

ITEM	NOZZLE	PRESSURE (PSI)	RADIUS (FT.)	FLOW G.P.M.	ZONE	QTY	REMARK	TOTAL G.P.M.
A	1O SERIES HE-VAN 360° Arc	20	8'-0"	1.46	#1	3	27° TRAJECTORY	4.38
B	8 SERIES HE-VAN 360° Arc	20	6'-0"	0.96	#1	3	24° TRAJECTORY	2.88
C	8 SERIES HE-VAN 90° Arc	20	6'-0"	0.24	#1	1	24° TRAJECTORY	0.24
D	8 SERIES HE-VAN 180° Arc	20	6'-0"	0.48	#1	6	24° TRAJECTORY	2.88
E	15LCS	20	3 x 12	0.40	#1	1	30° TRAJECTORY	0.40
H	15RCS	20	3 x 12	0.40	#1	1	30° TRAJECTORY	0.40
A	1O SERIES HE-VAN 360° Arc	20	8'-0"	1.46	#2	6	27° TRAJECTORY	8.76
B	8 SERIES HE-VAN 360° Arc	20	6'-0"	0.96	#2	1	24° TRAJECTORY	0.96
D	8 SERIES HE-VAN 180° Arc	20	6'-0"	0.48	#2	7	24° TRAJECTORY	3.36
F	15CST	20	4 x 28	1.00	#2	2	30° TRAJECTORY	2.00
							TOTAL G.P.M.	26.26

TOTAL NOZZLES (ZONA #1) = 15

TOTAL NOZZLES (ZONA #2) = 16



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE I PLANNING I INTERIOR DESIGN
LATITUDE ONE INT'L. BUSINESS CTR.
175 SW 7th ST. / Suite 1712
Miami, FL 33130.
305•731•1770 phone
FL. Architect Registration: AR 0012528

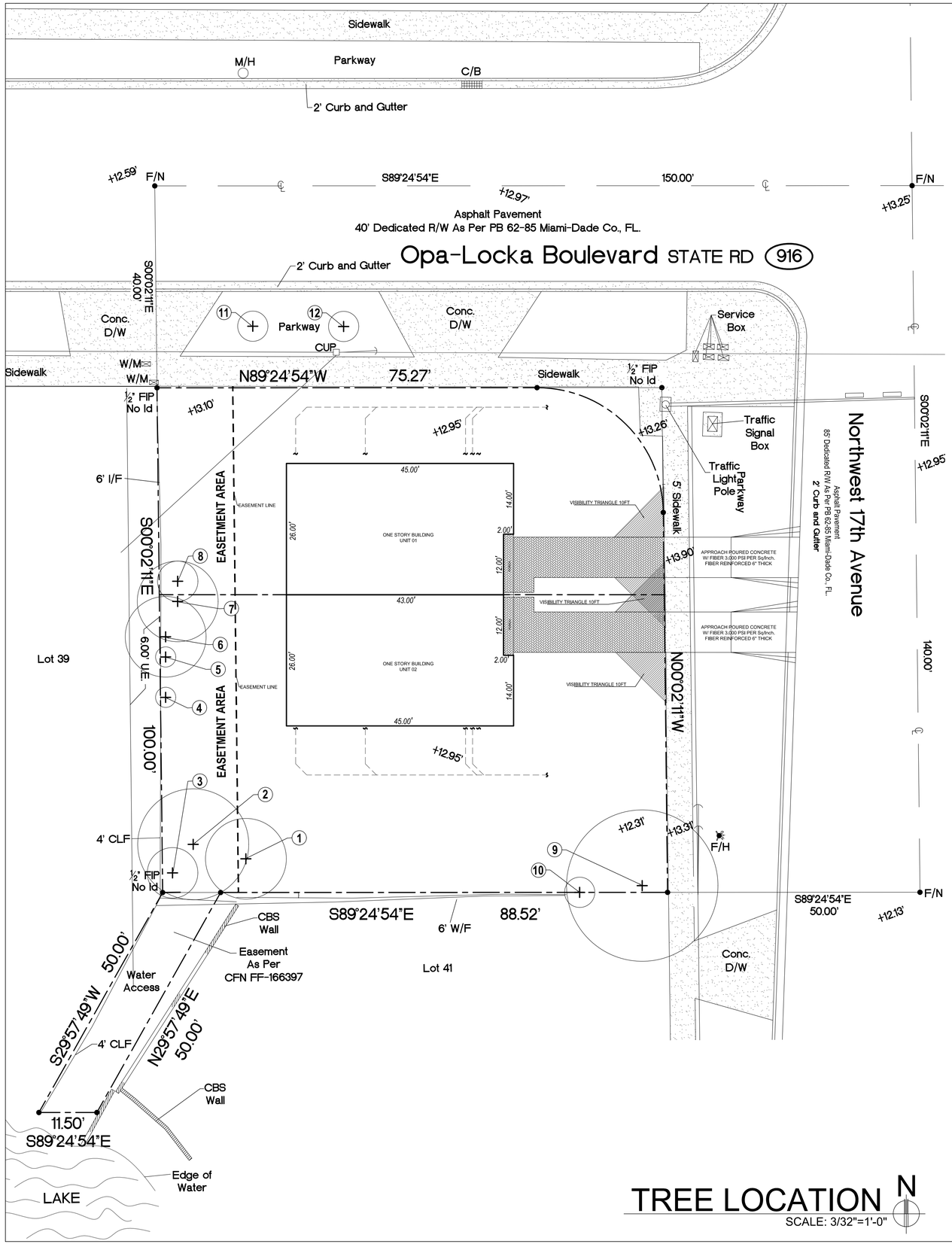
project: LANDSCAPE PLANNING
property ID: 08-2122-018-0200
owner: DMG INVESTMENTS TRUST LLC
address: 13600 NW 17th AVENUE OPA-LOCKA BOULEVARD

reworks: rework #1, rework #2, rework #3, rework #4, rework #5, rework #6
revisions: revision #1, revision #2, revision #3, revision #4, revision #5, revision #6
architect: Ralph Puig Jr. AR:12528
seal:
model:

PROPOSED IRRIGATION PLAN UNIT 02

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-004

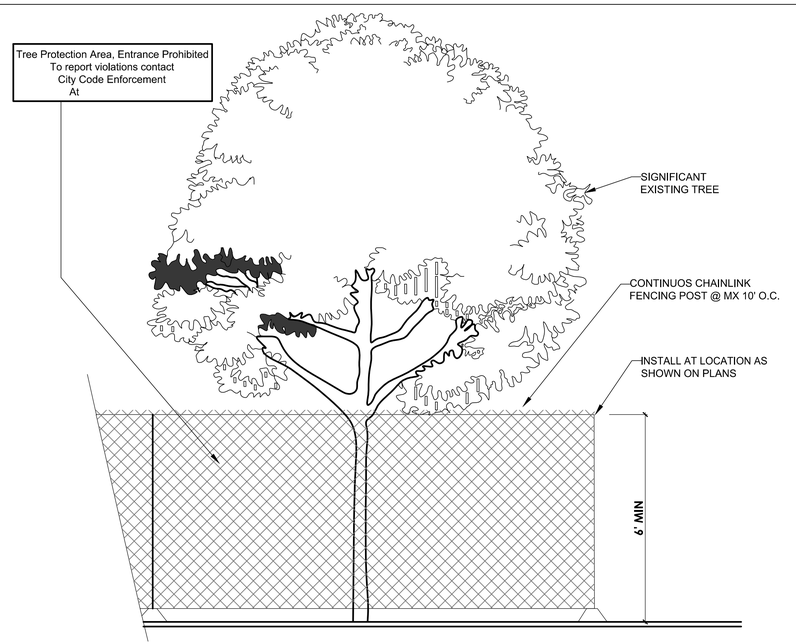
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TREE LOCATION

N

SCALE: 3/32"=1'-0"



1. MINIMUN SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING AND COVERED WITH SOIL AS SOON AS POSSIBLE.
3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.
4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE

TREE PROTECTION FENCING DETAIL

(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME
1	*Cocos nucifera*	coconut tree
2	*Ficus aurea*	Florida strangler fig
3	*Ficus aurea*	Florida strangler fig
4	*Ficus benjamina*	weeping fig
5	*Ficus benjamina*	weeping fig
6	*Ficus benjamina*	weeping fig
7	*Ficus benjamina*	weeping fig
8	*Ficus benjamina*	weeping fig
9	*Cocos nucifera*	coconut tree
10	*Veitchia merrillii*	christmas palm
11	*Conocarpus erectus var. sericeus*	silver buttonwood tree
12	*Conocarpus erectus var. sericeus*	silver buttonwood tree



LOCATION MAP

OREGONIAN PROFESSIONAL SERVICES
tree management & landscaping

7555 SW 153 rd Place - 106
Miami, FL 33193

786-218-8478
opslandscape@gmail.com

PROJECT: ARBORIST REPORT

PROPERTY ID: 08-2122-018-0200

OWNER: DMG INVESTMENTS TRUST LLC

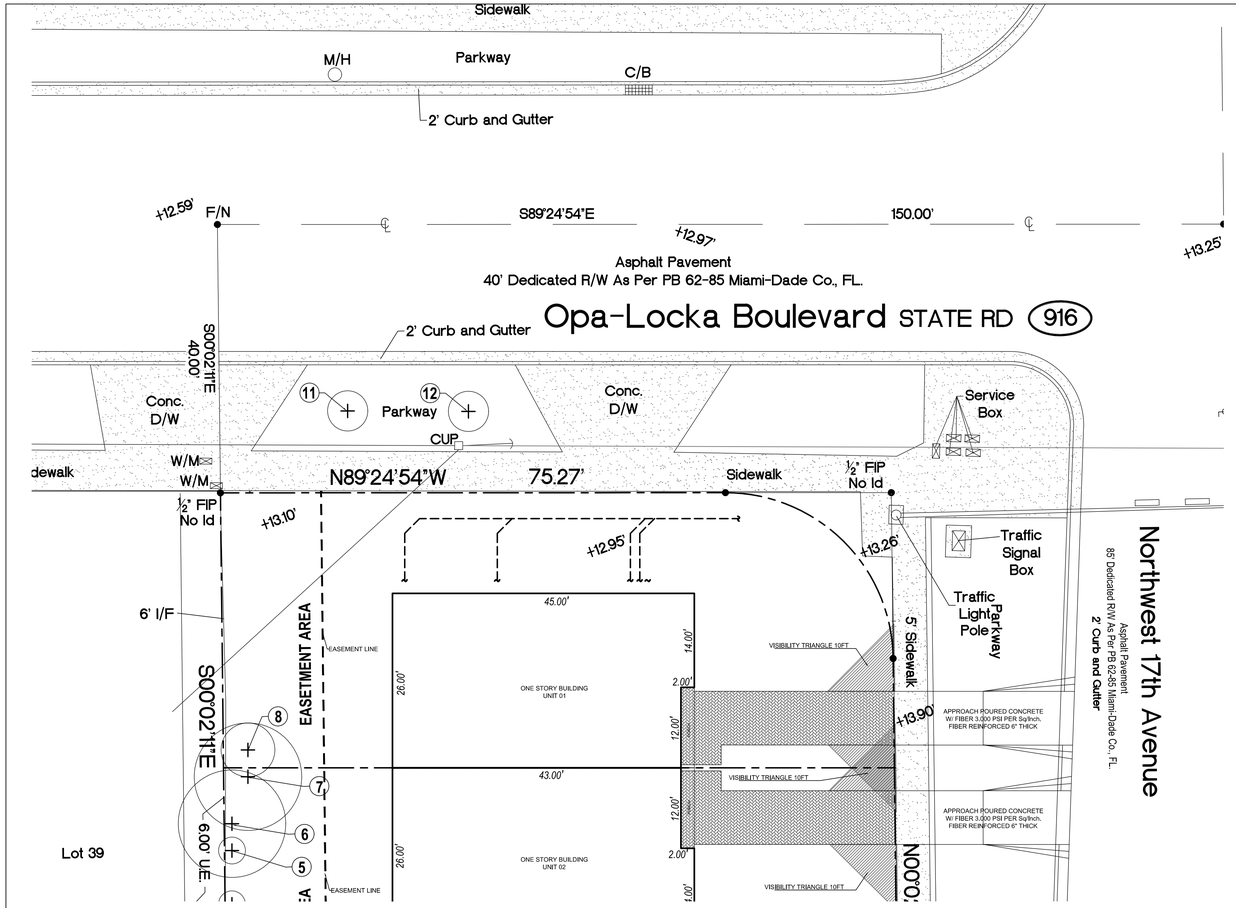
ADDRESS: 13600 NW 17th AVENUE
OPA-LOCKA BOULEVARD

ARBORIST: Pedro J. Partidas Cordero

ISA FL-9963A

DATE: 08/10/2023
SCALE: as shown
CHECHED BY: PP
SHEET

001



EXISTING TREE DISPOSITION (UNIT 01)

N

SCALE: 3/32"=1'-0"

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:09:45 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT

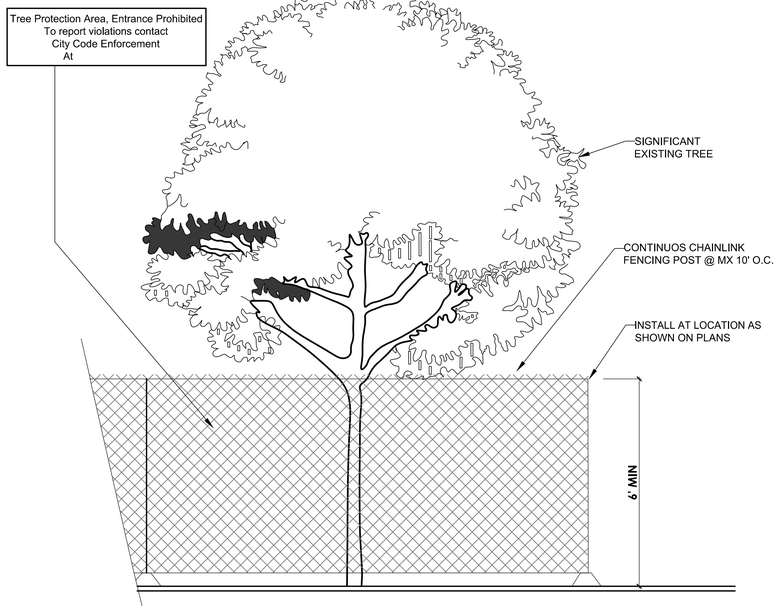
NOTES;

-THE APPROXIMATE LOCATION, SIZE AND CONDITIONS OF THE EXISTING TREES/PALMS WITHIN THE PROJECT LIMITS HAS BEEN COLLECTED FROM THE EXISTING ARBORIST REPORT PREPARED BY PEDRO J. PARTIDAS CORDERO, CERTIFIED ISA ARBORIST ISA FL-9963A, PH: 786-218-8478

-EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION (SEE DETAIL 1)

-CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT PRIOR TO THE REMOVAL OF TREES / PALMS PROPOSED TO BE REMOVED

-CONTRACTOR TO REMOVE ALL EXISTING SHRUBS AND GROUNDCOVERS UNLESS NOTED IN LANDSCAPE PLAN AS EXISTING TO REMAIN



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TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
8	*Ficus benjamina*	weeping fig	2	25	4	Poor	2	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN
11	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	6	Good	4	YES	REMAIN
12	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	8	Good	4	YES	REMAIN

NOTE

The trees #2, #3, #4, #5, #6, #7 & #8 shall be remain because they are in the Easement Area.



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE I PLANNING I INTERIOR DESIGN

LATITUDE ONE INT'L. BUSINESS CTR.
175 SW 7th ST. / Suite 1712
Miami, FL 33130.
305•731•1770 phone
FL. Architect Registration: AR 0012528

project: LANDSCAPE PLANNING
property ID: 08-2122-018-0200
owner: DMG INVESTMENTS TRUST LLC
address: 13600 NW 17th AVENUE
OPA-LOCKA BOULEVARD

reworks: rework #1, rework #2, rework #3, rework #4, rework #5, rework #6

revisions: revision #1, revision #2, revision #3, revision #4, revision #5, revision #6

architect: Ralph Puig Jr. AR:12528

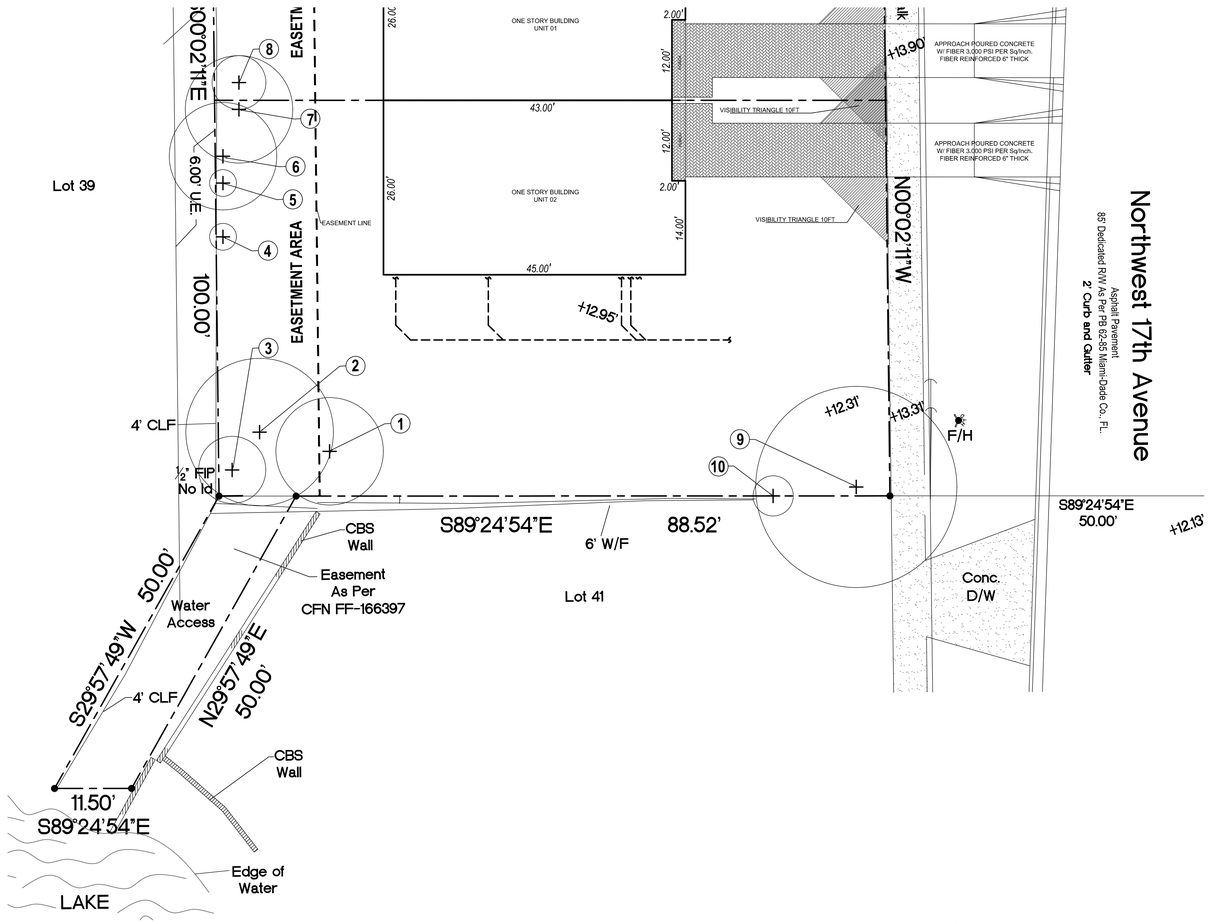
seal

model

EXISTING TREE DISPOSITION UNIT 01

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-001

DATE PLOTTED: Aug 23, 2023 - 8:23pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User.
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EXISTING TREE DISPOSITION UNIT 02

SCALE: 3/32"=1'-0"

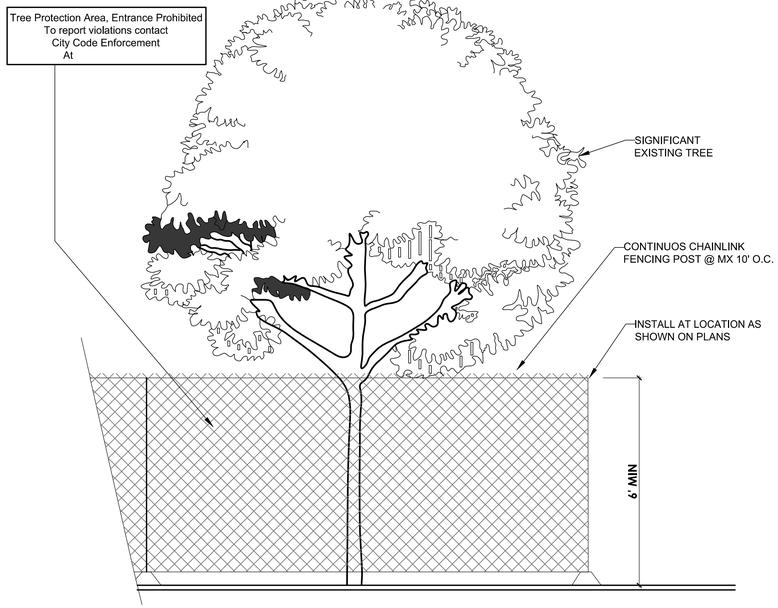
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(for public and private trees)

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NOTE

The trees #2, #3, #4, #5, #6 & #7 shall remain because they are located within the Easement Area.

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:07:21 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT



RPA
RALPH PUIG ARCHITECT
ARCHITECTURE | PLANNING | INTERIOR DESIGN
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project: LANDSCAPE PLANNING
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owner:
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reworks: rework #1, rework #2, rework #3, rework #4, rework #5, rework #6
revisions: revision #1, revision #2, revision #3, revision #4, revision #5, revision #6
architect:
seal:
model:

EXISTING TREE DISPOSITION UNIT 02

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-001

DATE PLOTTED: Aug 23, 2023 - 8:26pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User
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Sponsored by: Interim City Manager

RESOLUTION NO. 24-XXXX

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE FINAL SITE PLAN FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Applicant, DMG Investment Trust, LLC intends to construct a two-unit twin home building that will provide two three-bedroom units and appropriate parking spaces and landscaping in accordance with the City of Opa-Locka's Land Development Regulations ("City"); and

WHEREAS, the Applicant, has submitted a request for final site plan review to construct a two-unit twin home building that will provide two three-bedroom units in the Single Family Residential Zoning District (R-1); and

WHEREAS, Planning & Community Development staff for the City of Opa-Locka has reviewed the application of DMG Investment Trust, LLC and has determined that the applicant has provided all information required by Section 22-55(I) of the City of Opa-Locka's Land Development Code for proper consideration by the City Commission; and

WHEREAS, the Planning and Zoning Board has recommended approval of the Special Exception site plan request as required for this use in the R-1 zoning district, and

WHEREAS, the Planning and Zoning Board reviewed this request at a public hearing on December 12, 2023 and recommended approval of this request for final site plan review by a 5—0 vote as the site plan is provided herein as Exhibit "A"; and

WHEREAS, the City Commission of the City of Opa-Locka finds that it is in the best interest of the City and its residents to approve the special exception request as provided herein.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AS FOLLOWS:

SECTION 1. RECITALS.
The above recitals are true and correct and are incorporated into this Resolution by reference.

SECTION 2. APPROVAL/DENIAL.
Approval/Denial of Site Plan Review. The City Commission of the City of Opa-Locka, Florida hereby recommends approval / denial of this request for the Final Site Plan approval for the Construction of a two three-bedroom units and appropriate parking spaces and landscaping in accordance with the City of Opa-Locka's Land Development Regulations on the property located at the corner of NW 17th Avenue and Opa Locka Boulevard and identified by folios 08-2122-018-0200 in the R-1 Zoning District as set forth in the Site Plan detailed in Exhibit "A" attached hereto and incorporated herein.

Section 3. SCRIVENER'S ERRORS.
Sections of this Resolution may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the Interim City Manager following review by the City Attorney, without the need of a public hearing by filing a corrected copy of same with the City Clerk.

Section 4. EFFECTIVE DATE.
This Resolution shall, upon adoption, become effective as specified by the City of Opa-Locka's Code of Ordinances, Land Development Regulations and the City of Opa-Locka Charter**.**

PASSED and **ADOPTED** this _____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-locka
Agenda Cover Memo

Department Director:	Gregory D. Gay			**Department Director Signature:**		
City Manager:	Darvin Williams			**CM Signature**		
Commission Meeting Date:	January 10, 2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**
				X		
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**	**2nd Reading**
					X	
		X	**Public Hearing:** *(Enter X in box)*		**Yes** / **No**	**Yes** / **No**
					X	
Funding Source: *Account#:* **N/A**	*(Enter Fund & Dept)* Ex: See Financial Impact section below		**Advertising Requirement:** *(Enter X in box)*		**Yes**	**No**
					X	
ILA Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:** N/A			
		X				
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ■ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*	
	X					
Sponsor Name	Darvin Williams		**Department: Planning & Community Development**		City Manager	

Short Title:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, TO APPROVE OR DENY THE SITE PLAN REVIEW REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

Staff Summary:

The applicant, DMG Investment Trust, LLC desires to construct a two-unit twin home building that will provide two three-bedroom units and appropriate parking spaces and landscaping on the single-family (R-1) zoned parcel identified by folio 08-2122-018-0200. In accordance with the City of Opa-Locka's Land Development Regulations ("City LDR"), Ordinance 15-31, to permit the construction of a twin home on property zoned single-family. The Applicant, has submitted a request for site plan review and provided documentation to meet the approval criteria as required by City LDR Section 22-60, B, 1-12 to construct a two unit twin home building in the Single Family Residential Zoning District (R-1). The Planning & Community Development staff

has reviewed the application of DMG Investment Trust, LLC and has determined that the applicant has provided all information required by Section 22-55(I) of the City of Opa-Locka's Land Development Code for proper consideration by the Planning and Zoning Board and has reviewed this request at a public hearing on December 12, 2023 and recommended approval of this request for site plan review by a 5—0 vote and a copy of the site plan is provided herein as Exhibit "A".

Financial Impact

Approval of the Twin Home Site Plan Review will not provide any negative financial impact.

Proposed Action:

Staff recommended approval of this Resolution.

Attachment:

Draft Resolution
PZAB SP Application
Site Plan
Survey
Landscaping
Staff Report- Twin Home Site Plan Review

These blenders might cut you or burn your things. About 4.8 million have been recalled

BY DAVID J. NEAL
dneal@miamiherald.com

A blender should cut fruit, not your skin. Nor should it burn your possessions. So, BlendJet recalled about 4.9 million BlendJet 2 Portable Blenders sold in the United States and Canada.

"The recalled blenders can overheat or catch fire and the blender blades can break off, posing fire and laceration hazards to consumers," the U.S. Consumer Product Commission recall notice states.

That's not an idle concern. The recall notice says BlendJet knows about 329 times the blades broke; 49 times people got burned; one person who got sliced; 17 times the blenders overheated or started fires, causing $150,000 of property damage.



U.S. Consumer Product Safety Commission

BlendJet 2 Portable Blenders have been recalled.

BlendJet wants customers with the blenders, which were sold from October 2020 through this November, to reach out to the company for a free replacement of the base. Do this by cutting the rubber seal on the base into three or more pieces, shoot a photo with the pieces and the serial number on the base and email it to safety@blendjet.com or upload it to the recall website.

To see if this recall concerns your blender, you can go to BlendJet's site and enter your blender's serial number.

For other questions, either go to the recall website hyperlinked above or call BlendJet Monday through Friday, 8 a.m. to 10 p.m., Eastern time at 844-334-0562.

David J. Neal: 305-376-3559, @DavidJNeal

Miami Gardens, Palm Beach restaurant problems include rodents and flies

BY DAVID J. NEAL
dneal@miamiherald.com

A Miami Gardens and Rivera Beach restaurant were part of this week's Sick and Shut Down List of Miami-Dade and Palm Beach restaurants that failed inspection.

Once again, we remind you, we don't do the inspecting, and we don't choose who gets inspected. Direct your complaints to the Florida Department of Business and Professional Regulation.

In alphabetical order:

Caribbean Kitchen 305, 760 NW 183rd St., Miami Gardens: Routine inspection, 20 total violations, six High Priority violations.

We told you about this place with its hot water deficiencies — which means washing and cleaning deficiencies —and rodent problems earlier this week.

The kitchen was open again after it corrected the issue for the next day's re-inspection.

Mulligan's Beach House Singer Island, 2551 N. Ocean Ave., Riviera Beach: Complaint inspection, six total violations, five High Priority violations.

Eight flies at the inside bar were "flying around, landing on liquor bottles and the wall behind" the bar. Rodents left 34 droppings on the kitchen floor.

Mulligan's passed a second re-inspection two days after the original inspection.

CITY OF OPA-LOCKA, FLORIDA
NOTICE TO THE PUBLIC

NOTICE IS HEREBY GIVEN that the City Commission of the City of Opa-locka, Florida will hold public hearings at the Regular Commission Meeting on **Wednesday, January 10, 2024 at 7:00 p.m.,** in the City Commission Chambers at the Opa-locka Municipal Complex, 780 Fisherman Street, 3rd Floor, Opa-locka, Florida, to consider the following items for final adoption:

FIRST READING / PUBLIC HEARINGS:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

SECOND READING / PUBLIC HEARING:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, ENTITLED "OFF-STREET PARKING AND LOADING REQUIREMENTS" TO SPECIFICALLY AMEND SECTION 2-152(F) ENTITLED "GENERAL PRINCIPLES" TO PROVIDE FOR OUTDOOR STORAGE OF VEHICLES ONLY IN A DESIGNATED PARKING SPACE, PROHIBITING DOUBLE PARKING AND REQUIRING THAT ALL AREAS ARE FREE FROM UNSIGHTLY CONDITIONS; AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, SPECIFICALLY SECTION 2-160 (C)(4) ENTITLED "PERMITTED OFF-STREET PARKING" TO REQUIRE A CURRENT VALID LICENSE PLATE FOR RESIDENTIAL PARKING AND FURTHER REQUIRING THAT VEHICLES PARKED AS COMMERCIAL AND INDUSTRIAL FACILITIES HAVE A VALID LICENSE PLATE AND OR BILL OF SALE AND WORK ORDER POSTED VISIBLY ON THE DRIVER'S SIDE WINDOW, INCLUDING VIN NUMBER FOR VEHICLE, BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION IN CODE; PROVIDING FOR AN EFFECTIVE DATE.-

RESOLUTIONS / PUBLIC HEARINGS:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SPECIAL EXCEPTION REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING IN THE SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT (R-1), ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200; PROVIDING FOR AN EFFECTIVE DATE.

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE FINAL SITE PLAN FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

All interested persons are encouraged to participate and will be heard with respect to the public hearings.

Additional information on the above item may be obtained by contacting the Office of the City Clerk by telephone 305-953-2800 or email jflores@opalockafl.gov. To participate or provide comments virtually, please register on the City of Opa-locka website at www.opalockafl.gov no later than 7:00 p.m. on Wednesday, January 10, 2024.

In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodations to participate in the proceeding should contact the Office of the City Clerk at (305) 953-2800 for assistance not later than five (5) days prior to the proceeding. If hearing impaired, you may telephone the Florida Relay Service at (800) 955-8771 (TTY), (800) 955-8770 (Voice), (877) 955-8773 (Spanish) or (877) 955-8707 (Creole).

PURSUANT TO FS 286.0105: *Anyone who desires to appeal any decision made by any board, agency, or commission with respect to any matter considered at such meeting or hearing will need a record of the proceedings, and for that reason, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal may be based.*

Joanna Flores, CMC
City Clerk
City of Opa-locka

+ SITE INFORMATION

OWNER	DMG INVESTMENT TRUST LLC
FOLIO NUMBER	08-2122-018-0200
LOT AREA	10,575 Sq.Ft
ADDRESS	13600 NW 17 AVE.
LEGAL DESCRIPTION	PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 PORT LOTS 39 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

+ LOCATION



+ ZONING DATA:

ZONING: R-1

LOT SIZE	10,575 Sq.Ft		
	REQUIRED	EXISTING	PROPOSED
LOT COVERAGE	35%	-----	2.252 Sq / 22%
SETBACKS			
	REQUIRED	EXISTING	PROPOSED
FRONT	25 Ft.	25 Ft.	25 Ft.
INTERIOR SIDE	7.5 Ft.	---------	23'-0 Ft.
SIDE FACING STREET	15 Ft.	---------	25'-0" Ft.
REAR	25 Ft.	---------	30'-1" Ft.

+ SITE INVESTIGATION NOTE

EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF WORK THE BIDDER IS REQUIRED, BEFORE SUBMITTING HIS PROPOSAL, TO VISIT THE SITE OF THE PROPOSED WORK AND FAMILIARIZE HIM OR HERSELF WITH THE NATURE AND EXTENT OF THE WORK AND ANY LOCAL CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND EQUIPMENT, MATERIALS AND LABOR REQUIRED THEREFORE. SINCE THE WORK INVOLVES NEW AND/OR EXISTING BUILDINGS, SYSTEMS AND FACILITIES, SPECIAL CONSIDERATION SHALL BE GIVEN TO EXAMINATION OF WORKING CONDITIONS, NEW FACILITIES AND ALL BUILDING STRUCTURES FAMILIARIZE TO HIMSELF WITH ALL EXISTING CONDITIONS. SLIGHT VARIATION OF ROUTING AND OR CONSTRUCTIONS SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES. THESE VARIATIONS ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHENEVER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITY ASSUMED UNDER THIS CONTRACT.

+ ALTERATION PROJECT PROCEDURES

REQUIREMENTS INCLUDED:

COORDINATE WORK OF TRADES AND SCHEDULE ELEMENTS OF ALTERATIONS AND RENOVATION WORK BY PROCEDURES AND METHODS TO EXPEDITE COMPLETION OF THE WORK.

CUT, MOVE OR REMOVE ITEMS AS NECESSARY TO PROVIDE ACCESS OR TO ALLOW ALTERATIONS AND NEW WORK TO PROCEED. INCLUDE SUCH ITEM AS:

a. REPAIR OR REMOVAL OF HAZARDOUS OR UNSANITY CONDITIONS.

b. REMOVAL OF ABANDONED ITEMS AND ITEMS SERVING NO USEFUL PURPOSE, SUCH AS ABANDONED PIPING, CONDUIT, AND WIRING.

c. REMOVAL OF UNSUITABLE OR EXTRAGENEOUS MATERIALS NOT MARKED FOR SALVAGE, SUCH AS ABANDONED EQUIPMENT AND DEBRIS INCLUDING ROTTED WOOD, RUSTED METALS AND DETERIORATED CONCRETE.

ALTERATIONS AND CONNECTIONS OF NEW CONTRUCTION TO EXISTING CONSTRUCTION OCCUR AT DUST SENSITIVE AREAS. EXECUTE ALL MEASURES TO COMPLETELY CONTROL AND SEPARATE DUST FROM EXISTING AREA AND EQUIPMENT.

+ TERMITE PROTECTION

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRABEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES "

+ GENERAL SCOPE OF WORK

WORK ENCOMPASSED UNDER THIS SET OF CONTRACT DOCUMENTS INCLUDES THE CONSTRUCTION OF THE NEW ONE STORY RESIDENTIAL HOUSE.

+ NEW CONSTRUCTION:

- GROUND FLOOR:_____1,300,00 Sq.Ft.

+ NOTE

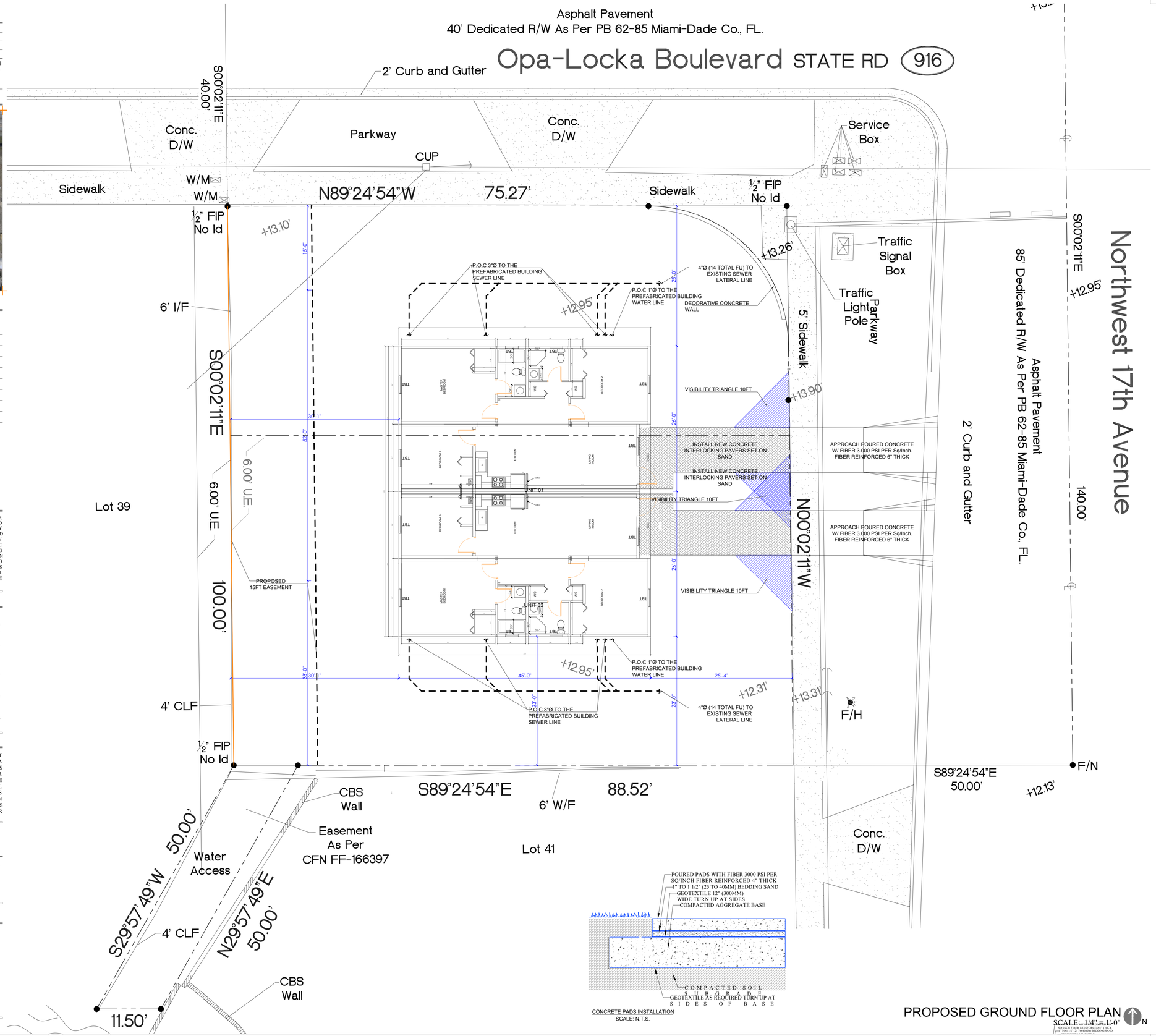
CONSTRUCTION DRAWINGS ARE DIAFRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF THE PROJECT.

CONTRACTOR TO PROVIDE ALL THE COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING PROJECT, EVEN IF NOT INCLUDED IN THE CONSTRUCTION DOCUMENTS.

ALTHOUGH IT IS UNDERSTOOD THAT THE CONTRACTOR IS NOT A LICENSED DESIGN PROFESSIONAL, THE CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND LOCATIONS OF SYSTEMS WITH ARCHITECTURE AND ALL DISCIPLINES INCLUDED IN THESE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR AGREES TO PROMPTLY ADVISE THE ARCHITECT OF ANY NONCONFORMITY OBSERVED BY, OR MADE KNOWN TO, THE CONTRACTOR.

REFER TO "CONSTRUCTION NOTES" ON SHEET A0.02 FOR FURTHER INSTRUCTIONS.



PROPOSED GROUND FLOOR PLAN
SCALE: 1/4" = 1'-0"

nandezD+D
design+development

PROJECT
13600 NW 17 AVE

OWNER
DMG INVESTMENT TRUST LLC

ARCHITECT
NANDEZ Design+Development
2223 SW 13Th AVE
MIAMI, FL 33145
tel:786.703.7704
info@nandezdd.com
AA 26002732
IB 26001520

SEAL

ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

REWORKS

1 2 3 4 5 7 8

REVISIONS

1 2 3 4 5 7 8

INFORMATION

PROPOSED SITE PLAN

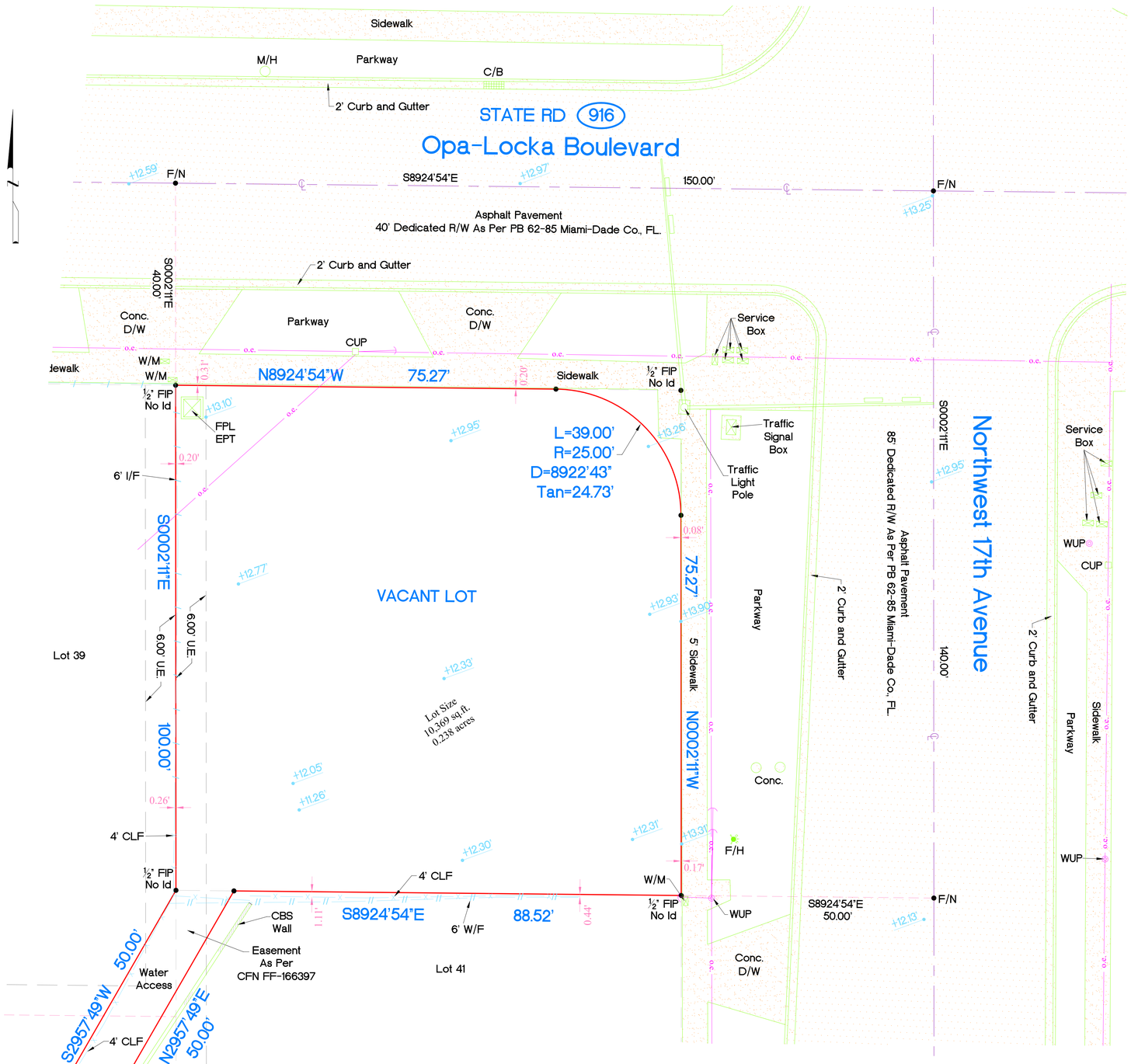
DATE: 10/11/2021
Scale: AS SHOWN
Job No.: 2021/
Drawn by: RP
Checked by: RP Jr.

Sheet
A101

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Boundary Survey

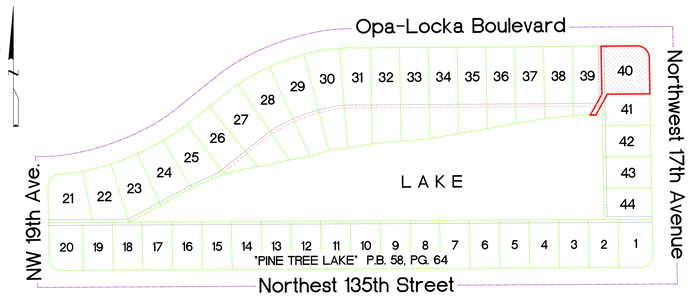
Graphic Scale 1" = 10'



Abbreviations of Legend

AVE.	=AVENUE
ASPH	=ASPHALT
A/W	=ANCHORD WIRE
A/C	=AIR CONDITIONER
BLDG	=BUILDING
B. COR.	=BLOCK CORNER
CAL	= CALCULATED
C.B.	=CATCH BASIN
CLF	=CHAIN LINK FENCE
CONC.	=CONCRETE
COL.	=COLUMN
C.U.P.	=CONCRETE UTILITY POLE
C.L.P.	=CONCRETE LIGHT POLE
CBS	=CONCRETE BLOCK STRUCTURE
C.M.E.	=CANAL MAINTENANCE EASEMENT
D	=DELTA
D/W	=DRIVEWAY
D.M.E.	=DRAINAGE & MAINTENANCE EASEMENT
ENC.	=ENCROACHMENT
E.T.P.	=ELECTRIC TRANSFORMER PAD
F.P.L.	=FLORIDA POWER AND LIGHT
F.H.	=FIRE HYDRANT
F.I.P.	=FOUND IRON PIPE
F.F.	=FINISH FLOOR
DH/F	=FOUND DRILL HOLE
F.R.	=FOUND REBAR
F/D	=FOUND DISC
F/N	=FOUND NAIL
I/F	=IRON FENCE
L	=LENGHT
L.M.E.	=LAKE MAINTENANCE EASEMENT
L.F.E.	=LOWEST FLOOR ELEVATION
L.P.	=LIGHT POLE
MEAS.	=MEASURED
M.H.	=MAN HOLE
M.L.	=MONUMENT LINE
N.G.V.D.	=NATIONAL GEODETIC VERTICAL DATUM
N.T.S.	=NOT TO SCALE
O.E.	=OVERHEAD ELECTRIC LINE
O.L.	=ON LINE
P.C.P.	=PERMANENT CONTROL POINT
P.M.	=PARKING METER
P.C.	=POINT OF CURVATURE
P/W	=PARKWAY
PL.	=PLANTER
P.O.C	=POINT OF COMMENCEMENT
P.O.B	=POINT OF BEGINNING
R	=RADIUS
RES	=RESIDENCE
R/W	=RIGHT OF WAY
S.D.H.	=SET DRILL HOLE
S/N	=SET NAIL
S.I.P.	=SET IRON PIPE
SDWLK	=SIDEWALK
ST	=STREET
T	=TANGENT
U.E.	=UTILITY EASEMENT
W/F	=WOOD FENCE
W.V.	=WATER VALVE
W.U.P.	=WOOD UTILITY POLE
x-0.00'	=DENOTES ELEVATIONS
	=BUILDING
	=DISTANCE
	=CATCH BASIN
	=WATER METER
	=W.U.P.
	=STATE ROAD
	=US HIGHWAY
	=INTERSTATE
	=MONITORY WELL

Location Sketch N.T.S.



Prepared By:
AFA & COMPANY, INC.
PROFESSIONAL LAND SURVEYORS AND MAPPERS
FLORIDA CERTIFICATE OF AUTHORIZATION No. LB 7498
13050 SW 133RD COURT,
MIAMI, FLORIDA 33186
E-MAIL: AFACO@BELLSOUTH.NET
PH: 305-234-0588

LEGAL DESCRIPTION:

Lot 40 and the following described portion of Lots 39 and 41; Commence at the Northwest corner of Lot 40; thence run S00°02'11"E, along the West line of Lot 40, for 100 feet to the Southwest corner of Lot 40 and the Point of Beginning of the parcel of land hereinafter to be described; thence run S29°57'49"W for 50 feet, more or less to the shoreline of a lake; thence run Easterly along said shoreline for 11.5 feet more or less; thence run N29°57'49"E for 50 feet more or less to a point on the South line of Lot 40; thence run N89°24'54"W, along the South line of Lot 40 for 11.48 feet to the Point of Beginning, all lying in "FIRST ADDITION TO PINE TREE LAKE", according to the Plat Thereof as Recorded in Plat Book 62, Page 85, of the Public Records of Miami-Dade County, Florida.

CERTIFIED ONLY TO:

DMG Investment Trust LLC

PROPERTY ADDRESS:

13600 Northwest 17th Avenue
Opa-Locka Florida 3354

ELEVATION INFORMATION
National Flood Insurance Program
FEMA Elev. Reference to NGVD 1929

Comm Panel	120650
Panel #	0314
Firm Zone:	"X"
Date of Firm:	09-11-2009
Base Flood Elev.	N/A
F.Floor Elev.	N/A
Garage Elev.	N/A
Suffix:	"L"
Elev. Reference to NGVD 1929	

JOB #	23-1128
DATE	09-21-2023
PB	62-85

Surveyors Notes:

#1 Land Shown Hereon were not abstracted for Easement and /or Right of Way Records. The Easement / Right of Way Show on Survey are as per plat of record unless otherewise noted.
#2 Benchmark: Miami-Dade County Public Works Dep. BM #ID: 692; Name: PN078; Elev. +13.14'
#3 Bearings as Shown hereon are Based upon Opa-Locka Boulevard, S89°24'54"E
#4 Please See Abbreviations
#5 Drawn By: A. Torres
#6 Date: 9-21-2023
#7 Completed Survey Field Date: 9-21-2023
#8 Disc No. 2023, Station Surveying Scion
#9 Last Revised:
#10 Zoned Building setback line not determined

Surveyor's Notes:

#11 The herein captioned Property was surveyed and described based on the Legal Description Provided by Client.
#12 This Certification is Only for the lands as Described, it is not a certification of Title, Zoning, Easements, or Freedom of encumbrances. ABSTRACT NOT REVIEWED.
#13 There may be additional Restrictions not Shown on this survey that may be found in the Public Records of Said County Examination of ABSTRACT OF TITLE will have to be made to determine recorded instruments, if any affecting this property.
#14 Accuracy: The expected use of land, as classified in the Standards of Practice (5J-17.052), is residential. The minimum relative distance accuracy for this type of boundary survey is 1.0 foot in 10,000.00' feet. the accuracy obtained by measurement and calculation of a closed geometric figure was found to exceed this requirement.
#15 Foundation and / or footing that may cross beyond the boundary lines of the parcel herein described are not shown hereon.
#16 Not valid without the signature and original seal of a Florida Licensed Surveyor and Mapper. additions or deletions to survey maps or reports by other than the signing party or parties.
#17 Contact the appropriate authority prior to any design work on the herein described parcel for building and zoning information.
#18 Underground Utilities are not depicted hereon, contact the appropriate authority prior to any design work or construction on the property herein described. Surveyor shall be notified as to any deviation from utilities shown hereon.
#19 Ownership subject to Opinion of Title.
#20 The location of the Flood Zone lines shown hereon are an approximate, based on the FEMA flood maps website. Confirmation of said Flood Zone lines location must be made with FEMA prior to any design.

AFA & Company, Inc. — Land Surveyors

This certifies that the survey of the property described hereon was made under my supervision & that the survey meets the Standards of Practice set forth by the Florida Board of Professional Land Surveyors & Mappers in Chapter 5J-17.052 of Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.
& That the Sketch hereon is a true and accurate representation thereof to the best of my knowledge and Belief, subject to notes and notations shown hereon.

Armando Alvarez

Digitally signed by Armando Alvarez
DN: c=US, o=AFA and Company Inc, dQualifier=A01410C000001888CB0346D0015FAA, cn=Armando Alvarez
Date: 2023.09.22 09:44:25 -04'00'

Armando F. Alvarez
Professional Surveyor & Mapper #5526
State of Florida
Not Valid unless Signed

Professional
Surveyors & Mappers LB 7498
13050 S.W. 133rd Court
Miami Florida, 33186
E-mail: afaco@bellsouth.net
Ph: (305) 234-0588

Received:
By:
Date:

" THE GREAT CITY "

City of OPA-LOCKA Florida

PLANNING & ZONING BOARD MEETING SCHEDULE AND REQUIREMENTS FY 2022-2023

TOTAL FEES: $_____ New Fees as of October 1, 2015

FY 2020-2021 Meeting Dates (1st Tuesday of Each Month)	**Date Application Found Sufficient**
October 4, 2022	August 19, 2022
November 8, 2022	September 16, 2022
December 6, 2022	October 14, 2022
January 3, 2023	November 18, 2022
February 7, 2023	December 16, 2022
March 7, 2023	January 13, 2023
April 4, 2023	February 18, 2023
May 2, 2023	March 17, 2023
June 6, 2023	April 14, 2023
July 11, 2023	May 19, 2023
August 1, 2023	June 16, 2023
September 5, 2023	July 21, 2023

1. All individuals seeking to appear before the Planning & Zoning Board must submit a complete Planning & Zoning Board application, with the required documents and fees totaling (as established by ordinance), paid by check or money order to the City of Opa-locka. Failure to submit all documents and fees will result in your case not being scheduled to be heard at a meeting.

2. If the applicant seeking to appear before the Planning & Zoning Board is not the property owner he must provide an affidavit of authorization from the property owner.

3. All regular meetings are held on the first Tuesday of each month at the City of Opa-locka City Commission Chambers, Meeting Time 7:00 P.M. *(time and location are subject to change, please check with the Planning and Community Development Department for exact time and location of the meetings).*

4. Application package must include all required documents per checklist and fees of The City of Opa-locka. The application will be reviewed by the Department and will be scheduled for the next P&Z meeting upon finding of sufficiency.

5. You are required to complete and return this application along with all the information and documentation (see page 2 check list) requested to the:

   City of Opa-locka
   Planning & Community Development Department
   780 Fishermen Street 4th floor
   Opa-locka, FL 33054
   Telephone: 305-953-2868, Ext. 1503
   Facsimile: 305-953-3060

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

" THE GREAT CITY "

City of OPA-LOCKA Florida

PLANNING & ZONING BOARD APPLICATION

APPLICATION NUMBER: _____ CHECK NUMBER: _____ DATE RECEIVED: _____

PROPERTY OWNER'S NAME: DMG INVESTMENT TRUST LLC

PROPERTY OWNER'S ADDRESS: 11890 SW 8TH ST STE 510 MIAMI, FL 33184
Number/Street City State/Zip Code

APPLICANT'S NAME: DMG INVESTMENT TRUST LLC

APPLICANT'S ADDRESS: 11890 SW 8TH ST STE 510 MIAMI, FL 33184
Number/Street City State/Zip Code

PHONE NUMBER: OFFICE 786-254-7895 HOME 786-413-5734 OTHER _____

SUBJECT PROPERTY ADDRESS: 13600 NW 17TH AVE OPALOCKA FL 33054
Number/Street

TAX FOLIO NUMBER: 08-2122-018-0200 PRESENT ZONING: RU-1

LEGAL DESCRIPTION: PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

Please check specific request:

___Tentative Plat
___Final Plat
___Comprehensive Plan Amendment: ___Small Scale; ___Large Scale *(please specify type of amendment below)*
___ Rezoning
___Drainage Plan
___Fill Permit Request
___Preliminary Site Plan Review
___Final Site Plan Review
___Conditional Use Permit – No Plans
___Conditional Use Permit – With Plans
___Special Exception – No Plans
✓Special Exception – With Plans
___Development Agreement
___Restrictive Covenant
___Other – Please specify: _____

Add any additional information that may be of importance to this request:

_____

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

PLANNING & ZONING BOARD APPLICATION
(Checklist)

Applications will not be accepted without the following data. For a public hearing, all items below are necessary and must be submitted.

✓ Completed application form

✓ Application fee payable to the City of Opa-locka by check or money order

✓ Copy of property owner's and/or applicant's driver license/photo I.D. & Incorporation Documents (Inc., LLC, …)

✓ Affidavit (**see below**), and power of attorney of the property owner (**page 3**) (**Both must be Notarized**)

✓ A completed Neighborhood Petition form (attached) with the signature of each property owner in front, in the rear, to the left and to the right of the subject property, indicating his or her support for the proposed project. (Must include name, address, folio and phone number).

✓ All preliminary and final site plans, along with property survey, signed and notarized application(s) must be submitted on flash drive in PDF format.

✓ Fifteen (15) certified boundary and topographic surveys of the property (two copies size 36 x 24 inches & 13 copies 11 x 17 inches). (The submitted property survey must not exceed a maximum of two (2) years from date created in order to be considered acceptable by the City of Opa-locka)

✓ Fifteen (15) copies of Site Development Plan showing all drainage, water, sewer, structures, landscaping and parking in accordance with the City's zoning ordinance; (two copies size 36 x 24 inches & 13 copies size 11 x 17 inches & at least 7 original Sealed Copies)

✓ Map showing parcel to be considered and all properties' legal descriptions thereof, within 375' radius of said parcel. Map to be 1" = 100" scale. Owner's name, address, folio number and legal description on each parcel (Original and 2 copies size of document to accommodate scale)

✓ Narrative concept must be submitted with application

AFFIDAVIT

I, Joel Dominguez, being first duly sworn, depose and say that I am the **OWNER** of the property ,and I understand that this application must be complete and accurate before a public hearing can be advertised.

Signature

09/19/2023
Date

Sworn to and subscribed before me:

This 19 day of September, 2023

Noel J Cardenas
Notary Public
Attach copy of identification

My commission expires 7/19/2026

Notary Public State of Florida
Noel Javier Cardenas
My Commission HH 289807
Expires 7/19/2026

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

PLANNING & ZONING BOARD APPLICATION
POWER OF ATTORNEY

This form is to be attached to all applications, and to be returned with the application. No application will be honored or persons heard by the Planning & Zoning Board unless a notarized copy of this Power of Attorney is submitted.

To: City of Opa-locka
From:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Subject: Power of Attorney (authorization for a person, other than the property owner, to speak in the property owner's behalf).

I _____, being first duly sworn, depose and say that I am the owner of the property legally described as:

_____
_____
_____
_____
_____

I do give to _____ the power of Attorney and authority to speak in my behalf in reference to the above described property. Further, by affixing my notarized signature to this document, I also authorize _____ to negotiate and commit to the City Commission and City Administration in my behalf. I will abide by all final determinations of the City Commission and City Administration.

_____
Signature

_____
Date

Sworn to and subscribed before me:

This_____ day of _____,_____

_____ My commission expires:_____
Notary Public

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

Attach copy of identification

PLANNING & ZONING BOARD
NEIGHBORHOOD PETITION

RE: PROPERTY ADDRESS: 13600 NW 17TH AVE OPA-LCOKA, FL 33054

LEGAL DESCRIPTION: PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

I SUPPORT THIS DEVELOPMENT REQUEST _____

I DO NOT SUPPORT THIS DEVELOPMENT REQUEST _____

PROPERTY OWNER'S NAME: JEAN J BOUCICAUT PHONE: _____

ADDRESS (If different): 13580 NW 17 AVE

_____

Signature

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

Received:
By:
Date:

Attach copy of identification

PLANNING & ZONING BOARD
NEIGHBORHOOD PETITION

RE: PROPERTY ADDRESS: 13600 NW 17TH AVE OPA-LCOKA, FL 33054

LEGAL DESCRIPTION: PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

I SUPPORT THIS DEVELOPMENT REQUEST _____

I DO NOT SUPPORT THIS DEVELOPMENT REQUEST _____

PROPERTY OWNER'S NAME: HANNAH V DUNBAR PHONE:_____

ADDRESS (If different): 1710 OPA LOCKA BLVD

_____
Signature

Reference to Ordinance 15-13
Land Development Regulations/ Zoning Code: Ordinance 15-31

COMPANY RESOLUTION / INCUMBENCY CERTIFICATE OF THE MEMBER(S) OF DMG INVESTMENT TRUST LLC, A FLORIDA LIMITED LIABILITY COMPANY

WHEREAS, **DMG INVESTMENT TRUST LLC, a Florida Limited Liability Company**, ("Company"), is the owner of the real property located at: 13600 NW 17 AVE MIAMI, FL 33054.

WHEREAS, said limited liability company is currently in good standing under the laws of the State of Florida, under valid Articles of Organization and has not been terminated or dissolved and Joel A. Dominguez, Authorized Member of DMG INVESTMENT GROUP LLC, as authorized member of DMG INVESTMENT TRUST LLC is given authority by the Articles of Organization to execute any and all documents on behalf of the limited liability company.

WHEREAS, the Company has authorized Joel A. Dominguez, Authorized Member of DMG INVESTMENT GROUP LLC, as authorized member of DMG INVESTMENT TRUST LLC to execute any and all instruments which may be required in connection with he following property:

13600 NW 17 AVE MIAMI, FL 33054

FURTHER RESOLVED, no dissolution, bankruptcy or insolvency proceeding with respect to the Company or its Members have been filed, no creditors have acquired or are attempting to acquire control of the Company by executing on, or attaching or seizing the Member's interest in the Company.

FURTHER RESOLVED, the following are duly elected or appointed to the offices of the Company as set forth opposite their names and incumbent in such offices as of the date hereof and that there are no other officers other than these:

OPTIMUM TRADING LLC, a Florida limited liability company

DMG INVESTMENT GROUP LLC, a Florida limited liability company

CERTIFICATE

We, the undersigned, hereby certify that, as of the 31 day of May, 2023, **DMG INVESTMENT TRUST LLC, a Florida Limited Liability Company**, is authorized and existing under the laws of the State of Florida, that the foregoing is a true copy of the Resolution adopted by the Members at a special meeting duly called and held of the 31 day of May, 2023 and that such resolution has not been rescinded or modified, and does not contravene any provisions of the Articles of Incorporation of **DMG INVESTMENT TRUST LLC, a Florida Limited Liability Company**.

IN WITNESS WHEREOF, the undersigned have affixed their names as members of this Company, this 31 day of May, 2023.

Members:

OPTIMUM TRADING LLC, a Florida limited liability company

By: Yoel Dominguez, Authorized Member

By: Yazmin Dominguez, Authorized Member

DMG INVESTMENT GROUP LLC, a Florida limited liability company

By: Joel A. Dominguez, Authorized Member



Detail by Entity Name

Florida Limited Liability Company
DMG INVESTMENT TRUST LLC

Filing Information

Document Number	L21000128122
FEI/EIN Number	87-1379054
Date Filed	03/18/2021
Effective Date	03/15/2021
State	FL
Status	ACTIVE

Principal Address

11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Changed: 01/04/2023

Mailing Address

11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Changed: 01/04/2023

Registered Agent Name & Address

DMG INVESTMENT GROUP
11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Name Changed: 02/28/2022

Address Changed: 01/04/2023

Authorized Person(s) Detail

Name & Address

Title AMBR

OPTIMUM TRADING LLC

11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Title AMBR

DMG INVESTMENT GROUP LLC
11890 SW 8TH ST
SUITE 510
MIAMI, FL 33184

Annual Reports

Report Year	Filed Date
2022	02/28/2022
2023	01/04/2023

Document Images

01/04/2023 -- ANNUAL REPORT	View image in PDF format
02/28/2022 -- ANNUAL REPORT	View image in PDF format
03/18/2021 -- Florida Limited Liability	View image in PDF format

	FOLIO	PROPERTY ADDRESS	OWNER	LEGAL DESCRIPTION
1	08-2122-018-0200	SUBJECT PROPERTY	DMG INVESTMENT TRUST LLC	PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY11.5FT N 29 DEG E50FT E88.52FT N100FT W100FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6
2	08-2122-000-0270	1761 OPA LOCKA BLVD	OPA PARK LLC	22 52 41 11.90 AC BEG 308.07FTN & 25FTE OF SW COR OF SE1/4 OF SE1/4 TH NELY & ELY AD 708.87FT E426.25FT N130FT N 41 DEG W 890.32FT S 44 DEG W 499.21 FT E183.18FT S332.27FT W308.18FT S TO POB ALL LYG N OF OPA LOCKA BLVD LESS EXT AREA OF CURVE IN SW COR FOR R/W OR 25266-3821 0107 5
3	08-2122-000-0195	1701 OPA LOCKA BLVD	OPA PARK LLC	22 52 41 1.563 AC BEG 35FTW & 2090.73FTS OF NE COR OF SE1/4 OF SEC TH W200FT N130FT N 41 DEG W 126.10FT TO THE WATER EDGE OF LAKE N 44 DEG E 70.88FT N 64 DEG E 68.54FT E172.89FT S305.91FT TO POB LOT SIZE 68084 SQ FT OR 25266-3821 0107 5
4	30-2123-000-0070	1601 OPA LOCKA BLVD	TRUSTEE CHURCH OF GOD	23 52 41 3.48 AC W1/2 OF SW1/4 OF SW1/4 LYG N OF OPA LOCKA BLVD LESS N528FT & LESS W35FT & LESS EXT AREA OF CURVE IN SW COR FOR R/W LOT SIZE 151452 SQ FT
5	06-2123-000-0050	1525 NW 135 ST	CITY OF NORTH MIAMI	23 52 41 13.66 AC M/L SW1/4 OF SW1/4 LYG S OF OPA LOCKA BLVD & N OF 135 ST R/W LOT SIZE 595030 SQ FT
6	08-2122-018-0140	1760 OPA LOCKA BLVD	JASMINE K HAMLIN	22 52 41 1ST ADDN TO PINE TREE LAKE LOT 34 PB 62-85 LOT SIZE 60.000 X 185 COC 25436-1608 02 2007 4
7	08-2122-018-0150	1750 OPA LOCKA BLVD	IRIS A EVANGELISTA	1ST ADDN TO PINE TREE LAKE LOT 35 PB 62-85 LOT SIZE 60.000 X 175 OR 19873-2922 0601 5
8	08-2122-018-0160	1740 OPA LOCKA BLVD	MARY E MOOD	22 52 41 PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 36 LOT SIZE 60.000 X 165 OR 10580-1681 1179 1
9	08-2122-018-0170	1730 OPA LOCKA BLVD	ANDRES PERDOMO	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 37 LOT SIZE 60.000 X 155 OR 20307-2372 0302 1 COC 23837-3194 09 2005 4
10	08-2122-018-0180	1720 OPA LOCKA BLVD	WILLIE F HENRY &W CLARETTA SMITH	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 38 LOT SIZE 60.000 X 148 OR 18600-0257 0499 1
11	08-2122-018-0190	1710 OPA LOCKA BLVD	HANNAH V DUNBAR	1ST ADDN TO PINE TREE LAKE BEG AT NW COR LOT 39 E60FT S100FT S 29 DEG W50FT SWLY40FT N145FT TO POB LOT SIZE 8250 SQ FT PB 62-85 COC 22650-4111-4119 0804 6
12	08-2122-018-0210	13580 NW 17 AVE	J J BOUCICAUT & W RAYMONDE	PB 62-85 1ST ADDN TO PINE TREE LAKE PORT OF LOTS 39 & 41 BEG NE COR OF LOT 41 TH S65.41FT W100FT N25FT SWLY9.5FT N 29 DEG E50FT E88.52FT TO POB LOT SIZE 6569 SQUARE FEET OR 11073-1875 0481 6
13	08-2122-018-0220	13560 NW 17 AVE	FANNIE M BRUNSON RAMSEY JERRY RAMSEY	PINE TREE LAKE 1ST ADD PB 62-85 LOT 42 LOT SIZE 65.000 X 100 OR 16153-4061 1193 1
14	08-2122-018-0230	13540 NW 17 AVE	CARMELINE PIERRE &H GIDE	22 52 41 PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 43 LOT SIZE 65.000 X 103 OR 19957-0324 0401 5
15	08-2122-018-0240	13520 NW 17 AVE	GEORGE E ELLIS JR	1ST ADDN TO PINE TREE LAKE PB 62-85 LOT 44 LOT SIZE 65.200 X 106 OR 16780-0969 0495 1
16	08-2122-001-0010	1701 NW 135 ST	MILSE MARZO &W PLACIDA	PINE TREE LAKE PB 58-64 LOT 1 LOT SIZE IRREGULAR OR 20005-3096 1001 1
17	08-2122-001-0020	1711 NW 135 ST	DELLERSON FAMILY LLC 2	PINE TREE LAKE PB 58-64 LOT 2 & PROP INT IN LAKE LOT SIZE 62.000 X 100 OR 20261-1732 0102 5
18	08-2122-001-0030	1721 NW 135 ST	JOSE MARRERO &W MARIBEL TORRES	22 52 41 PINE TREE LAKE PB 58-64 LOT 3 & PROP INT IN LAKE OR 17634-0923 0597 1 COC 23103-4650 11 2004 4
19	08-2122-001-0040	1731 NW 135 ST	COMPTON HARRIS &W BARBARA	PINE TREE LAKE PB 58-64 LOT 4 & PROP INT IN LAKE LOT SIZE 62.000 X 100 G CASE # 87-28782 24

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7	08-2122-018-0150	1750 OPA LOCKA BLVD	IRIS A EVANGELISTA	1ST ADDN TO PINE TREE LAKE LOT 35 PB 62-85 LOT SIZE 60.000 X 175 OR 19873-2922 0601 5
8	08-2122-018-0160	1740 OPA LOCKA BLVD	MARY E MOOD	22 52 41 PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 36 LOT SIZE 60.000 X 165 OR 10580-1681 1179 1
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17	08-2122-001-0020	1711 NW 135 ST	DELLERSON FAMILY LLC 2	PINE TREE LAKE PB 58-64 LOT 2 & PROP INT IN LAKE LOT SIZE 62.000 X 100 OR 20261-1732 0102 5
18	08-2122-001-0030	1721 NW 135 ST	JOSE MARRERO &W MARIBEL TORRES	22 52 41 PINE TREE LAKE PB 58-64 LOT 3 & PROP INT IN LAKE OR 17634-0923 0597 1 COC 23103-4650 11 2004 4
19	08-2122-001-0040	1731 NW 135 ST	COMPTON HARRIS &W BARBARA	PINE TREE LAKE PB 58-64 LOT 4 & PROP INT IN LAKE LOT SIZE 62.000 X 100 G CASE # 87-28782 24

DMG
DEVELOPERS

PROJECT NARRATIVE

Preliminary Development Plan.

Pine Tree Lakes Twin-homes
13600 NW 17th Ave Miami, FL 33054

This narrative is written to provide a general project concept, the initial project timing, and details regarding the overall development. The proposed project is located near the southwest corner of NW 17th Avenue and Opa-Locka Blvd in Opa-Locka, Florida.

A site plan is included at the end of this narrative.

The project is consistent with several visions of the Opa-Locka's 20/30 Comprehensive Plan and will revitalize that corner.

The overall lot coverage is way under the required 35% at 2,252 SF or 22%.

The project consists of two 26'X42' side-by-side Modular units manufactured by a local business.

The developer takes into consideration a 15FT easement along the south limit of the property to allow the city access to the Pine Tree Lake for regular maintenance.

DMG Investment Trust LLC DBA / DMG DEVELOPERS
11890 SW 8th ST Suite 510 Miami, FL 33184
786.413.5734
www.dmgdevelopers.com

Building & Licensing
Planning & Community Development

780 Fisherman Street, 4th Floor
Opa-locka, FL 33054

Gregory D. Gay, Director
Development Services

Phone: (305) 953-2868, Ext. 1501
Fax: (305) 953-3060

December 14, 2021

DMG Investment Group, LLC
C/O Joel A. Dominguez,
178 Giralda Ave, 2nd Floor
Coral Gables, FL 33134

RE: Zoning Review-For the property at the corner Of NW 17th Ave & Opa-locka Boulevard, Opa-locka, FL 33054
Folio: 08-2122-018-0200

Mr. Dominguez,

Thank you for your interest in developing the property identified by folio 08-2122-018-0200. On December 2nd, 2021, we discussed your options to develop this 10,575 square foot property that is zoned for single-family development. We know you are interested in obtaining the highest and best use for this site and after review of the City Land Development Regulations we therefore inform you of the following options that are available to you:

1. Option 1 - Build one single family homes that complies with the required setbacks. (Single Family Detached) Submit building permits only.
2. Option 2 - Build two single family homes that share a common wall between the two homes [also referred to as a twin home] and each home complies with the required setbacks. (Single Family Attached) This path requires a formal Special Exception hearing review before the Planning & Zoning Board and formal review and approval by the City Commission at a public hearing. A maintenance easement for access to the lake would need to be considered as part of the siteplan of the property.

3. Option 3 – Replat your property into two lots. Each lot will be 5287.5 sf. A maintena easement for access to the lake would need to be considered as part of the replat of property. Build two single family homes by right or build two twinhomes by Spe Exception. Split the property will permit you to build four single family homes wl two [2] of each would share a common wall on each new parcel and each hc complies with the required setbacks. (Single Family Attached) This path require formal Special Exception hearing review before the Planning & Zoning Board and for review and approval by the City Commission at a public hearing.
4. Option 4 - Rezone the site to Duplex and build two duplexes/twin homes. rezoning request would require formal review before a Planning & Zoning Board formal review and approval by the City Commission at a public hearing. The site p for the proposed two duplex development would also be presented for review approval. A maintenance easement for access to the lake would need to be conside as part of the rezoning of the property.

Option 4 may be the most challenging as the PCD Department, by policy, is required to recomm against any zoning change request that may not meet the criteria for recommendation to change zoning to a higher adjacent residential zoning. We can further discuss this process if it is b considered.

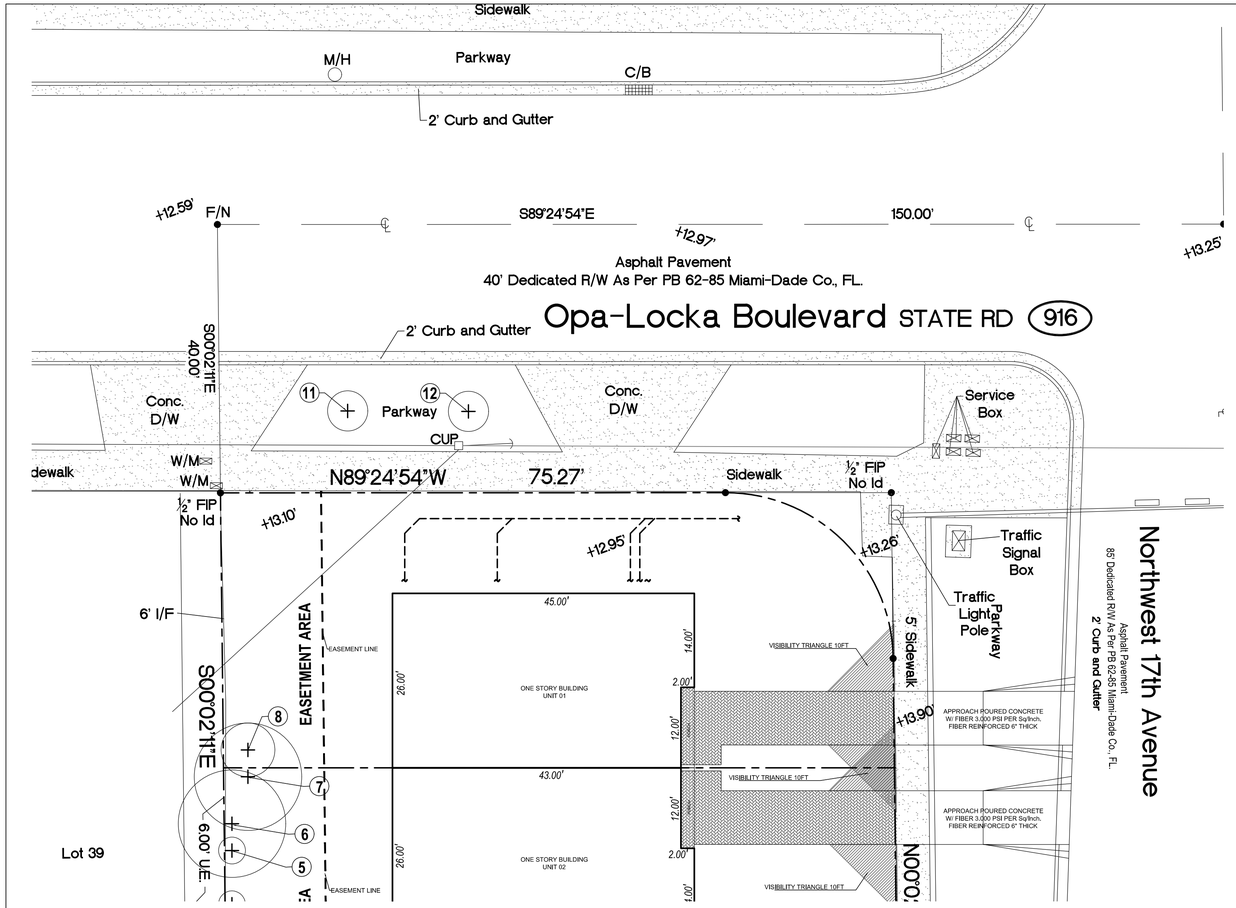
This should make your options clear, however if you have any questions, please advise.

Thank you for helping make our City Great!

Sincerely,

Gerald Lee, Zoning Official-Planning & Community Development

cc Gregory D. Gay, Director of Development Services - B&L|PCD



EXISTING TREE DISPOSITION (UNIT 01)

N

SCALE: 3/32"=1'-0"

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:09:45 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT

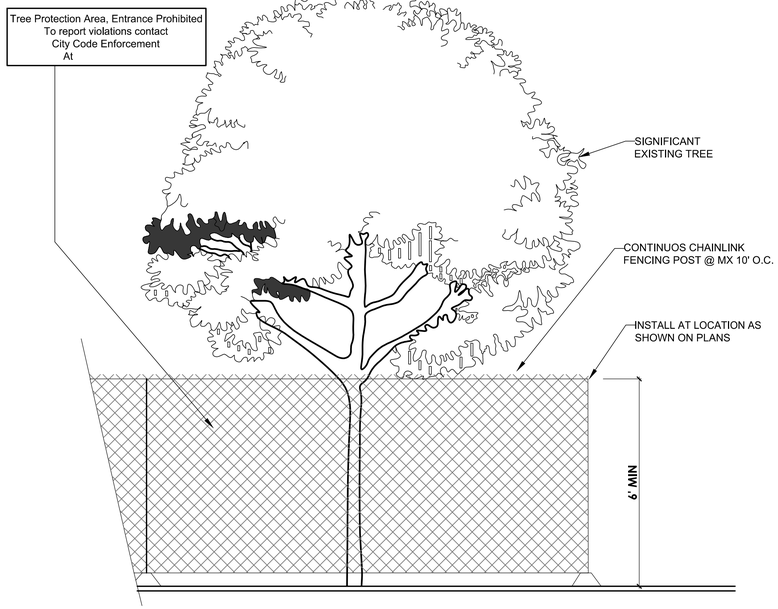
NOTES;

-THE APPROXIMATE LOCATION, SIZE AND CONDITIONS OF THE EXISTING TREES/PALMS WITHIN THE PROJECT LIMITS HAS BEEN COLLECTED FROM THE EXISTING ARBORIST REPORT PREPARED BY PEDRO J. PARTIDAS CORDERO, CERTIFIED ISA ARBORIST ISA FL-9963A, PH: 786-218-8478

-EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION (SEE DETAIL 1)

-CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT PRIOR TO THE REMOVAL OF TREES / PALMS PROPOSED TO BE REMOVED

-CONTRACTOR TO REMOVE ALL EXISTING SHRUBS AND GROUNDCOVERS UNLESS NOTED IN LANDSCAPE PLAN AS EXISTING TO REMAIN



1. MINIMUN SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING AND COVERED WITH SOIL AS SOON AS POSSIBLE.
3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.
4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE

TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
8	*Ficus benjamina*	weeping fig	2	25	4	Poor	2	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN
11	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	6	Good	4	YES	REMAIN
12	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	8	Good	4	YES	REMAIN

NOTE

The trees #2, #3, #4, #5, #6, #7 & #8 shall be remain because they are in the Easement Area.



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE I PLANNING I INTERIOR DESIGN

LATITUDE ONE INT'L. BUSINESS CTR.
175 SW 7th ST. / Suite 1712
Miami, FL 33130.
305•731•1770 phone
FL. Architect Registration: AR 0012528

project: LANDSCAPE PLANNING
property ID: 08-2122-018-0200
owner: DMG INVESTMENTS TRUST LLC
address: 13600 NW 17th AVENUE
OPA-LOCKA BOULEVARD

reworks: rework #1, rework #2, rework #3, rework #4, rework #5, rework #6

revisions: revision #1, revision #2, revision #3, revision #4, revision #5, revision #6

architect: Ralph Puig Jr. AR:12528

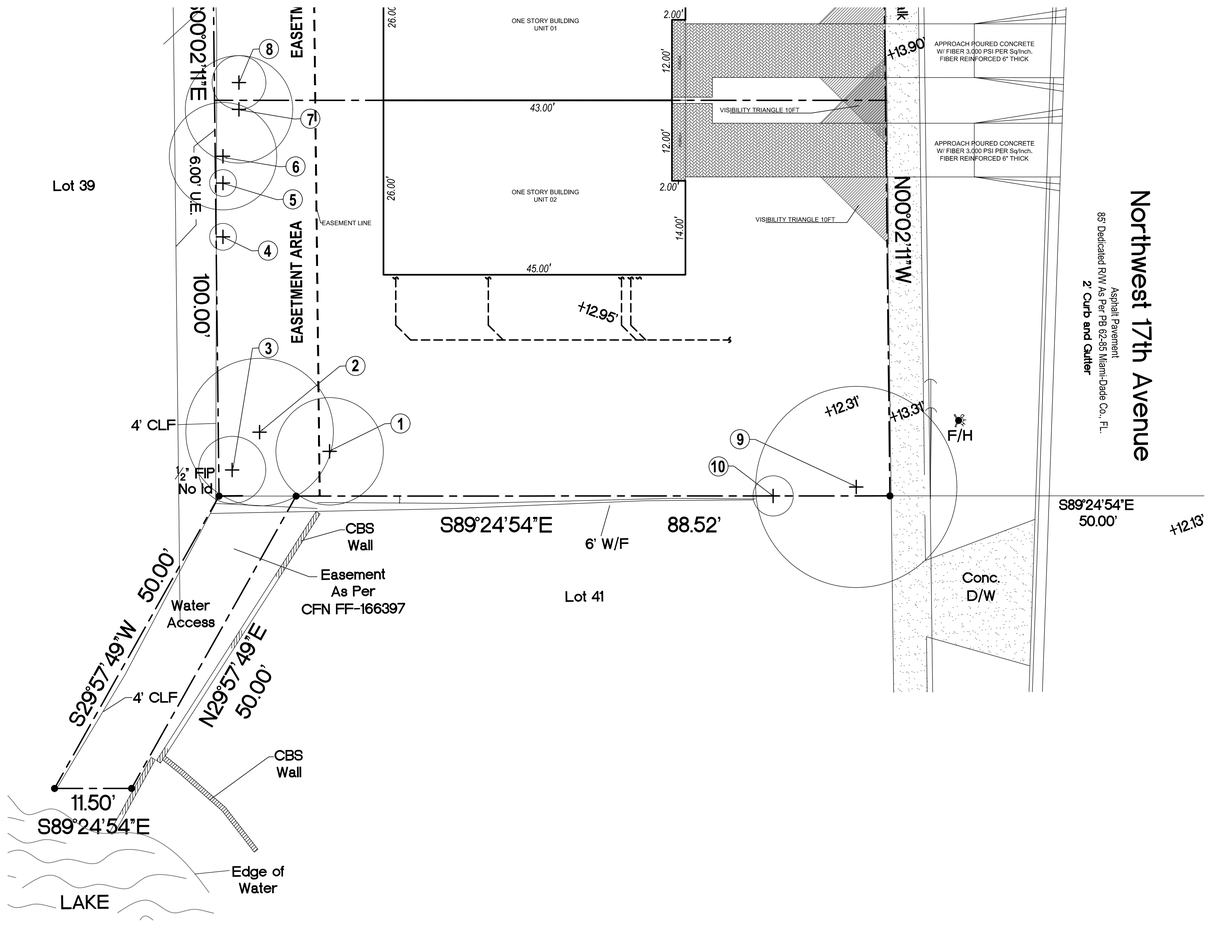
seal

model

EXISTING TREE DISPOSITION UNIT 01

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-001

DATE PLOTTED: Aug 23, 2023 - 8:23pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User.
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EXISTING TREE DISPOSITION UNIT 02

SCALE: 3/32"=1'-0"

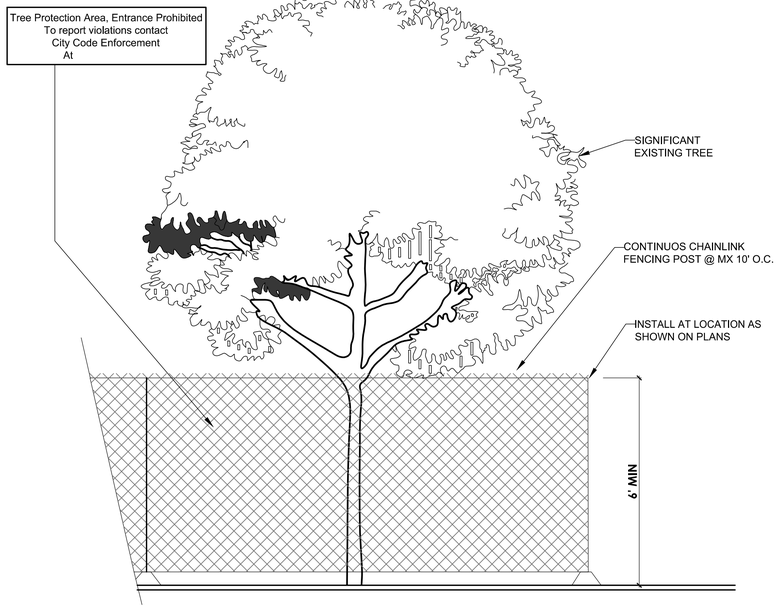
NOTES;

-THE APPROXIMATE LOCATION, SIZE AND CONDITIONS OF THE EXISTING TREES/PALMS WITHIN THE PROJECT LIMITS HAS BEEN COLLECTED FROM THE EXISTING ARBORIST REPORT PREPARED BY PEDRO J. PARTIDAS CORDERO, CERTIFIED ISA ARBORIST ISA FL-9963A, PH: 786-218-8478

-EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION (SEE DETAIL 1)

-CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT PRIOR TO THE REMOVAL OF TREES / PALMS PROPOSED TO BE REMOVED

-CONTRACTOR TO REMOVE ALL EXISTING SHRUBS AND GROUNDCOVERS UNLESS NOTED IN LANDSCAPE PLAN AS EXISTING TO REMAIN



1. MINIMUN SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
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TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

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1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN

NOTE

The trees #2, #3, #4, #5, #6 & #7 shall remain because they are located within the Easement Area.

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:07:21 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT



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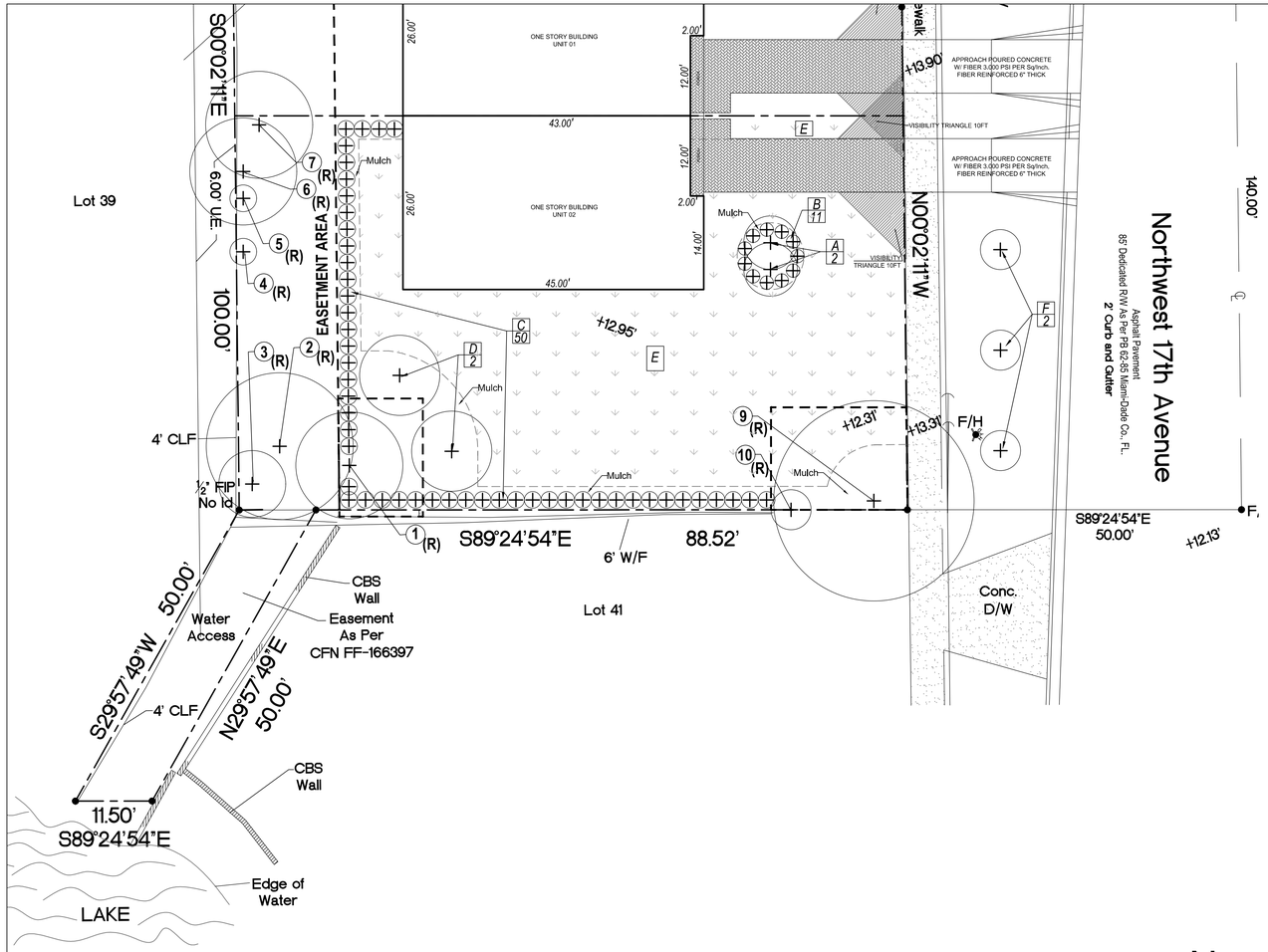
project: LANDSCAPE PLANNING
property ID:
owner:
address: 13600 NW 17th AVENUE OPA-LOCKA BOULEVARD

reworks: rework #1, rework #2, rework #3, rework #4, rework #5, rework #6
revisions: revision #1, revision #2, revision #3, revision #4, revision #5, revision #6
architect:
seal:
model:

EXISTING TREE DISPOSITION UNIT 02

date: 08/10/2023
scale: as shown
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sheet: L-001

DATE PLOTTED: Aug 23, 2023 - 8:26pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User
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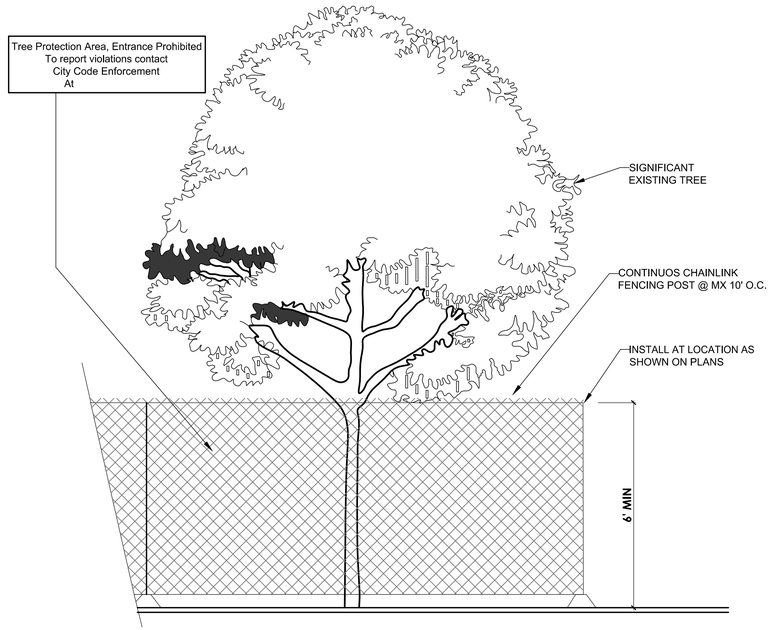
LEGEND	
MARK	DESCRIPTION
⊕	TREE OR PALM NUMBER
[ ]	TREE PROTECTION FENCE
X (R)	EXISTING TREE TO REMAIN
X / X	TREE CODE / QTY. OF TREES

PROPOSED LANDSCAPE PLAN (UNIT 02)

SCALE: 3/32"=1'-0"

LANDSCAPE LEGEND / PROPOSED

CODE	SCIENTIFIC NAME	COMMON NAME	QTY	DROUGHT TOLERANCE	NATIVE	SPECIFICATIONS	CONTAINER SIZE	SPACING
PALMS								
A	*Phoenix roebelenii*	pygmy date palm	2	MEDIUM	NO	7' HT. x 6' SPR	F.G.	AS SHOWN
D	*Veitchia montgomeriana*	montgomery palm	2	MEDIUM	NO	14' HT. x 12' SPR	F.G.	AS SHOWN
SHRUBS & GROUNDCOVERS								
B	*Hamelia patens*	firebush	11	MEDIUM	YES	24"' HT. x 24" SPR	3 GAL.	30" O.C
C	*Clusia flava*	small leaf clusia	50	HIGH	YES	36" HT. x 30" SPR	7 GAL.	30" O.C
E	*stenotaphrum secundatum*	St. Augustine grass	2633 SQF		YES	staggerd panels		
TREES								
F	*Conocarpus erectus var. sericeus*	silver buttonwood tree	3	MEDIUM	YES	7' HT. x 6' SPR	F.G.	AS SHOWN



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TREE PROTECTION FENCING DETAIL
(for public and private trees)

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10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN

NOTE
The trees #2, #3, #4, #5, #6 & #7 shall remain because they are located within the Easement Area.

CALCULATIONS AREAS

ZONING DISTRICT: R-1
LOT AREA : ----------6399 SF -----0.14 ACRES
EASETMENT AREA --------- 1385 SF
NET LOT AREA------6399 SF - 1385 SF = 5014 SF
NET OPEN SPACE : 3878 SF

TREE
PROVIDED IN THE LOT --------- 4
STREET TREE PROVIDED------ 3
TOTAL TREES------- 7

SHRUBS
PROVIDED ----------61

IRRIGATION PLAN PROVIDED: AUTO IRRIGATION

Ralph Puig
Digitally signed by Ralph Puig
Date: 2023.08.24 09:12:22 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE | PLANNING | INTERIOR DESIGN
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project
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address 13600 NW 17th AVENUE
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reworks
rework #1
rework #2
rework #3
rework #4
rework #5
rework #6

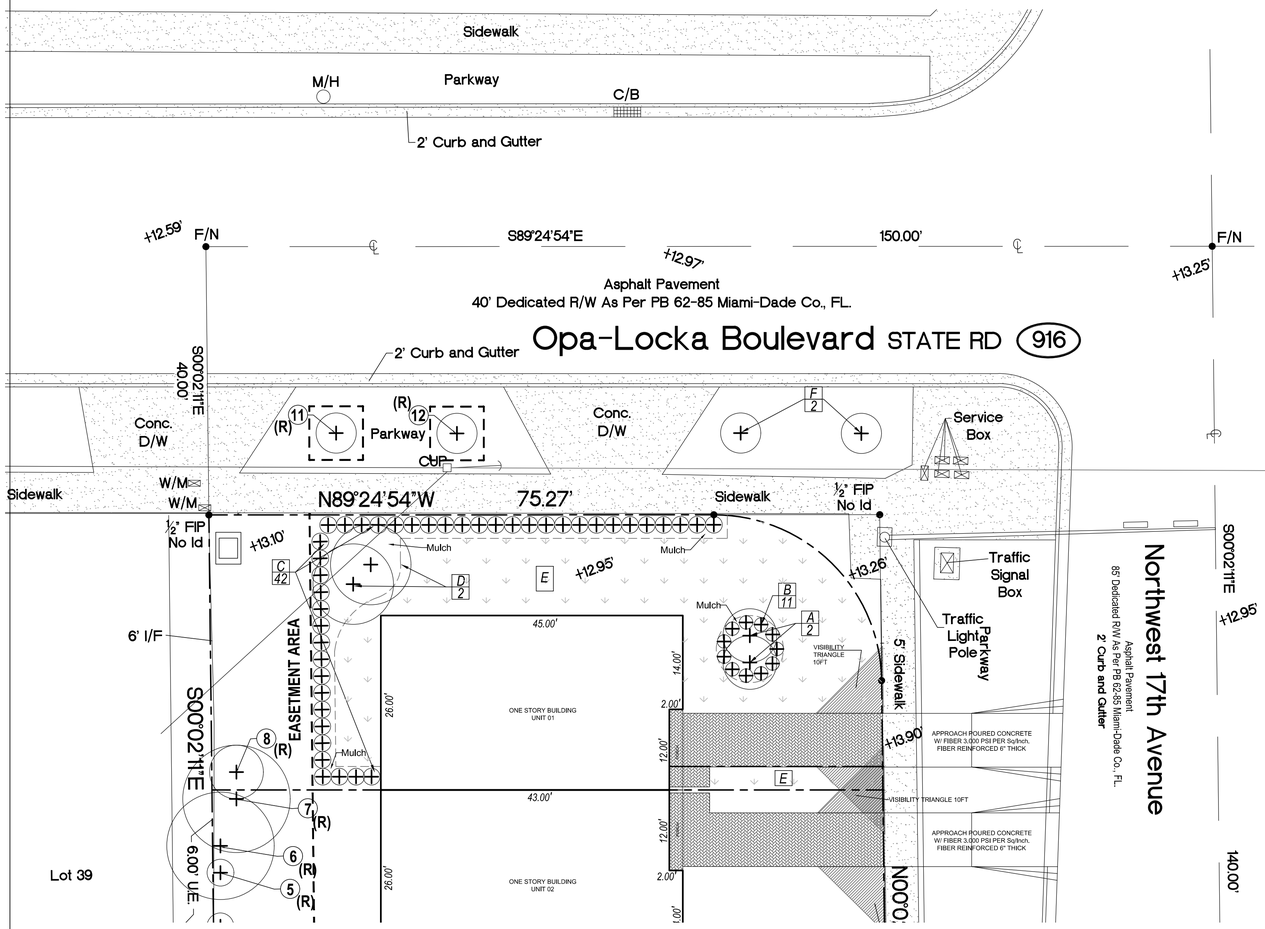
revisions
revision #1
revision #2
revision #3
revision #4
revision #5
revision #6

architect
seal
model

PROPOSED LANDSCAPE PLAN UNIT 02

date: 08/10/2023
scale: as shown
checked by: RP
sheet L-002

DATE PLOTTED: Aug 23, 2023 - 8:29pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User
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PROPOSED LANDSCAPE PLAN (UNIT 01)

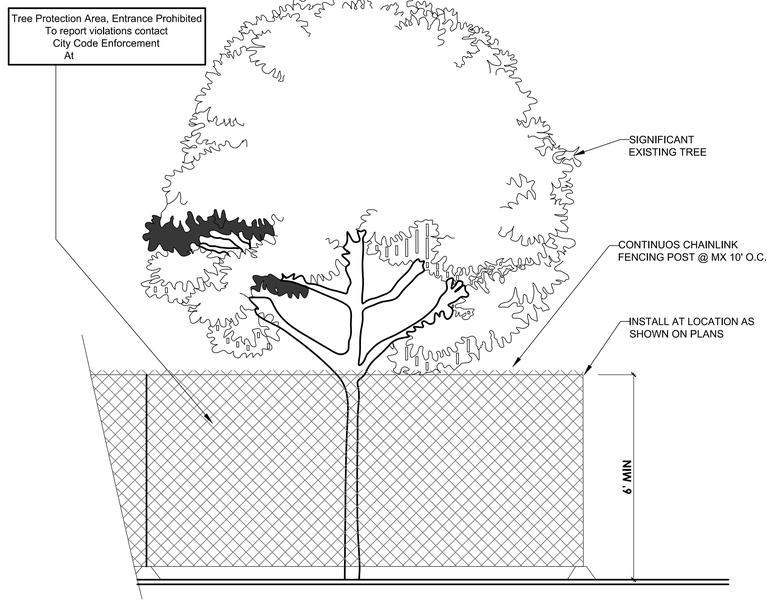
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N

LEGEND	
MARK	DESCRIPTION
⊕	TREE OR PALM NUMBER
[ ]	TREE PROTECTION FENCE
X (R)	EXISTING TREE TO REMAIN
X / X	TREE CODE / QTY. OF TREES

LANDSCAPE LEGEND / PROPOSED

CODE	SCIENTIFIC NAME	COMMON NAME	QTY	DROUGHT TOLERANCE	NATIVE	SPECIFICATIONS	CONTAINER SIZE	SPACING
PALMS								
A	*Phoenix roebelenii*	pygmy date palm	2	MEDIUM	NO	7' HT. x 6' SPR	F.G.	AS SHOWN
D	*Veitchia montgomeriana*	montgomery palm	2	MEDIUM	NO	14' HT. x 12' SPR	F.G.	AS SHOWN
SHRUBS & GROUNDCOVERS								
B	*Hamelia patens*	firebush	11	MEDIUM	YES	24"' HT. x 24" SPR	3 GAL.	30" O.C
C	*Clusia flava*	small leaf clusia	42	HIGH	YES	36" HT. x 30" SPR	7 GAL.	30" O.C
E	*stenotaphrum secundatum*	St. Augustine grass	1351 SQF		YES	staggerd panels		
TREES								
F	*Conocarpus erectus var. sericeus*	silver buttonwood tree	2	MEDIUM	YES	7' HT. x 6' SPR	F.G.	AS SHOWN



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TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME
8 (R)	*Ficus benjamina*	weeping fig

NOTE
The tree #8 shall remain because it is in the Easement Area.

CALCULATIONS AREAS

ZONING DISTRICT: R-1
LOT AREA ----------3967 SF -----0.091 ACRES
EASEMENT AREA ----------615 SF
NET LOT AREA ----------3967 - 615 = 3352 SF
NET OPEN SPACE : 2206 SF

TREE
PROVIDED IN THE LOT --------- 4
EXISTING STREET TREE ------- 2
STREET TREE PROVIDED------ 2
TOTAL TREES------ 8

SHRUBS
PROVIDED ----------53

IRRIGATION PLAN PROVIDED: AUTO IRRIGATION

Ralph Puig
Digitally signed by Ralph Puig
Date: 2023.08.24 09:05:41 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT



LOCATION MAP

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project	LANDSCAPE PLANNING
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reworks	rework #1 / rework #2 / rework #3 / rework #4 / rework #5 / rework #6
revisions	revision #1 / revision #2 / revision #3 / revision #4 / revision #5 / revision #6
architect	Ralph Puig Jr. AR:12528
seal	
model	

PROPOSED LANDSCAPE PLAN UNIT 01

date: 08/10/2023
scale: as shown
checked by: RP
sheet L-002

DATE PLOTTED: Aug 23, 2023 - 7:51pm FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: AutoCad User
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PLANNING & ZONING BOARD

DECEMBER 05TH

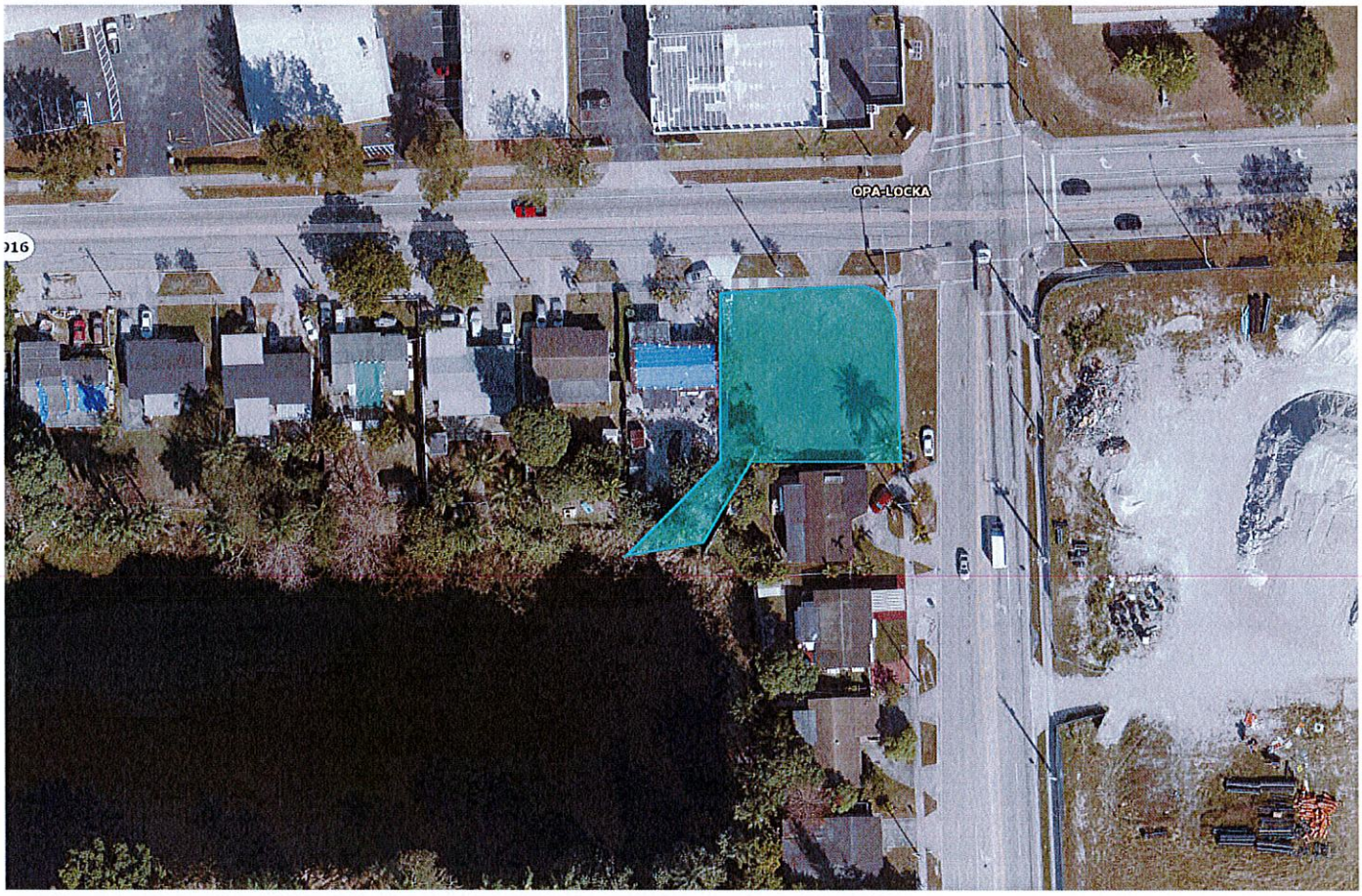
2023

CONSTRUCTION OF A TWIN HOME BUILDING- SITE PLAN REVIEW

Staff Report

APPLICANT'S REQUEST:

A RESOLUTION OF THE PLANNING & ZONING BOARD OF THE CITY OF OPA-LOCKA, FLORIDA, RECOMMENDING APPROVAL OR DENIAL OF THE FINAL SITE PLAN REVIEW REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.



I. Site Background

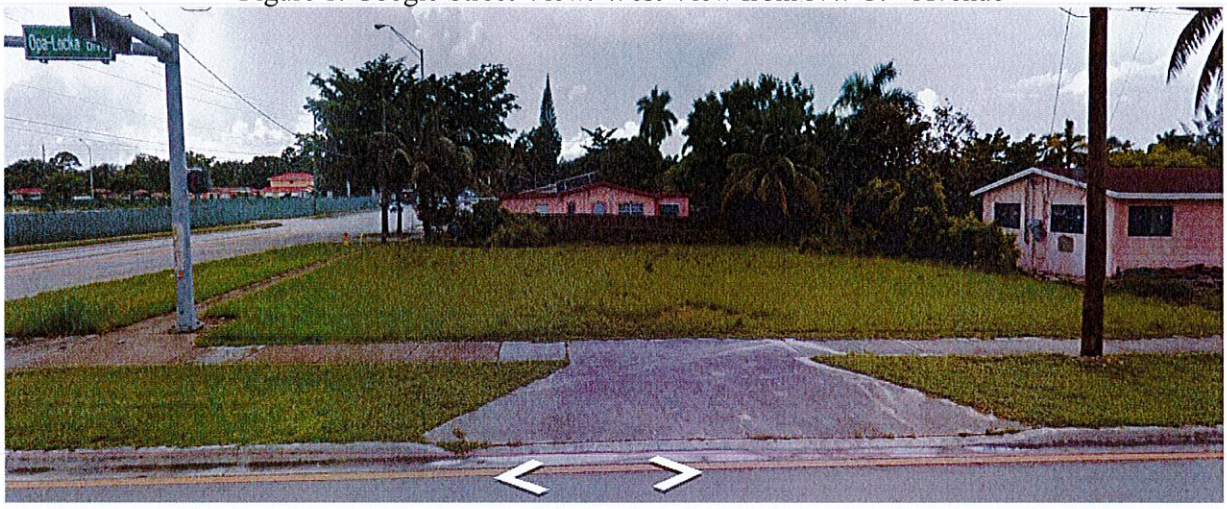
- According to Miami-Dade County Property Appraiser's website, the subject Property's legal description is as follo

PB 65-85
1ST ADDN TO PINE TREE LAKE LOT 40 & PORT LOTS 39 & 41 BEG AT NW COR LOT 40 100FTS 29 DEG W50FT NELY 11.5 FT N 29 DEG E50 FT E88.52 FT N100 FT W100FT W100 FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090-1810 02 2005 6

- The proposed project site is a vacant 10,575 square foot lot located at the south-east corner of Opa locka Boulevard and NW 17th Avenue. The site is zoned Single Family Residential and has a land use designation of Low-Density Residential. With the current residential zoning R-1, the square footage of this parcel and the residential land use designation, this site could be used a twin home development after Special Exception Revie approval and after Site Plan Review approval.



Figure 1: Google Street View: West View from NW 17th Avenue



II. Project Details

- **Applicant's intent**

The Applicant, DMG Investment Trust, LLC. intends to construct a twin home on this single family 10,575 square foot lot. Twin homes are permitted in the Duplex (R-2 Zoning District and in the Single Family R-1 Zoning district after Special Exception Review approval. They also intend to provide appropriate parking and landscaping in accordance with the City of Opa-locka's Land Development Regulations.

The applicant has submitted two application requests for the development of this site:

1. To review for special exception an opportunity to build a twin home on this site.
2. To review and consider for approval the site plan to build a twin home on this site.

To accommodate the new intended uses for this vacant residential site will require the review and recommendation of the Planning & Zoning Board and the review and approval of the City Commission concerning these two requests.

Site Computations & Land Development Regulation / Zoning Code	Table 1		
Applicant	DMG INVESTMENT TRUST, LLC		
Folio Number (s)	Opa-locka: 08-2122-018-0200;		
Address Location	Corner of NW 17 Avenue and Opa locka Boulevard, Opa-locka, FL 33054		
Building (s) Footprint	Building Footprint/Building Coverage Building 1 1,170 SF; Building Footprint/Building Coverage Building 2 1,170 SF Greenspace/Landscape Area – 2,206 SF		
Floor Area Ratio	<1.0 FAR N/A		
Zoning	**R-1 – Single Family Residential**		
Zoning Code Consistency	The proposed use of this property for residential twin home use is consistent with the City Land Development Regulations as a Special Exception.		
Existing Land Use	Vacant Land		
Future Land Use Designation	Low- Density Residential		
Comprehensive Plan Consistency	- The proposed use for a single family to occupy each of the twin homes is consistent with the Comprehensive Plan		
Applicable LDR Sections	Ordinance no. 15-31, Article III Sec; 22-55; Article IV Sec. 22-79, Article 22-83,		
SET BACKS/ YARD	**REQUIRED**	**PROPOSED**	**COMPLIANCE**
Bldg. 1 Front	**25 Feet**	**25 Feet**	**YES**
Bldg. 2 Front	**25 Feet**	**25 Feet**	**YES**
Bldg. 1 Rear	**15 Feet**	**30 Feet**	**Yes**
Bldg. 2 Rear	**15 Feet**	**30 Feet**	**Yes**
Side Interior	**7.5 Feet**	**23 Feet**	**YES**
Side Street	**15 Feet**	**25 Feet**	**Yes**
Corner Lots/ Other	**N/A**	**N/A**	**N/A**
Lot Coverage (Max Impervious Area)	**60%**	**45%**	**Yes**
Lot Density	**N/A**	**N/A**	**N/A**
Lot Size	**4,800 SF**	**10,575 SF**	**YES**

Lot Width	**N/A**	**N/A**	**N/A**
Building Height	**2 Stories or 25 Feet whichever less**	**Twin Home:** 1 Stories/ 25 Feet	**YES**
Structure Length	**N/A**	**N/A**	**N/A**
Other Vehicular Use Area Landscaping	**N/A** **Total Landscaping Area**	**N/A** **2,206 sq. ft.**	**Yes**
Parking Details	**Single Family/Twin Home** **2 Parking Spaces for each unit**	**Two Parking Spaces for each unit.**	**YES**
Landscape/ Pervious Lot Coverage	**10% minimum required pervious**	**27% provided**	**YES**
Notification Requirement	This request will be properly noticed pursuant to state law and city charter by the city clerk's office. - A copy of notice for advertisement titles were given to the Clerk's Office on Tuesday, November 21st, 2023. To be advertise at least 10 days prior to this Planning and Zoning Board meeting on Tuesday, December 5th, 2023. - City Commission Meeting: TBD		
Local Government Action Required	The City Commission must review this tentative plat and consider approval/disapproval after it is reviewed by the Planning and Zoning Board and any other applicable board or agency.		

• Overall Analysis

Existing Conditions:

- The Subject Property is generally adjacent to residential properties to the west and vacant land outside the City of Opa-locka to the east. There is also Industrial zoned properties North of this site.
- This development is within a residential neighborhood.
- Property is currently vacant and overgrown.

PZAB Special Exception Review Criteria-(Per Ordinance 15-31, Sec. 22-60, B Approval Criteria)

1. Compliance with the City's Comprehensive Plan.
2. Consistent with the "character and purpose" of the zoning district.
3. The size, shape and character of the property are suited for the proposed use.
4. Compatibility with the existing uses near the property.
5. Will not adversely affect the development of the general neighborhood or district.
6. Will not generate vehicular traffic or create vehicular circulation or ingress/egress problems or parking demands that have an unfavorable impact on surrounding properties when compared with uses permitted by right in the same district.
7. Potential for fire and/or other equally or greater dangerous hazards.
8. Create an unfavorable environment impacts on surrounding uses (e.g. noise, glare, smoke, dust, odor, fumes, water pollution, or general nuisance).
9. Consistent with existing and planned pedestrian and vehicular circulation adjacent to and near the property.

10. Site is adequately served by essential public services and facilities not requiring additional public expense in infrastructure improvements.
11. Will not adversely affect any site or feature of historical, cultural, natural or scenic importance.
12. Will not be contrary to the public health, safety, and welfare, provided that denial based exclusively on this language shall include explicit findings regarding the way in which granting the special exception would be contrary to the public health, safety and welfare.

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT: SPECIAL EXCEPTION REVIEW ANALYSIS: The Development if approved

Would be in compliance with the City's Comprehensive Plan
Would be consistent with the character and purpose of the zoning district.
The size, shape and character of the property are suited for the proposed use.
Would be compatible with the existing uses near & adjacent to the property.
Would not adversely affect the development of the general neighborhood or district.
Would not generate vehicular traffic or create vehicular circulation or ingress/egress problems that would have an unfavorable impact on surrounding properties when compared with uses permitted by right in the same district given the size of the property.
Would not increase the potential for fire or /and other equally or greater dangerous hazards.
Would not create any unfavorable environmental impacts on surrounding uses, including noise, glare, smoke, dust, odor, fumes, water pollution, or general nuisance.
Would be consistent with existing and planned pedestrian and vehicular circulation adjacent to and near the property.

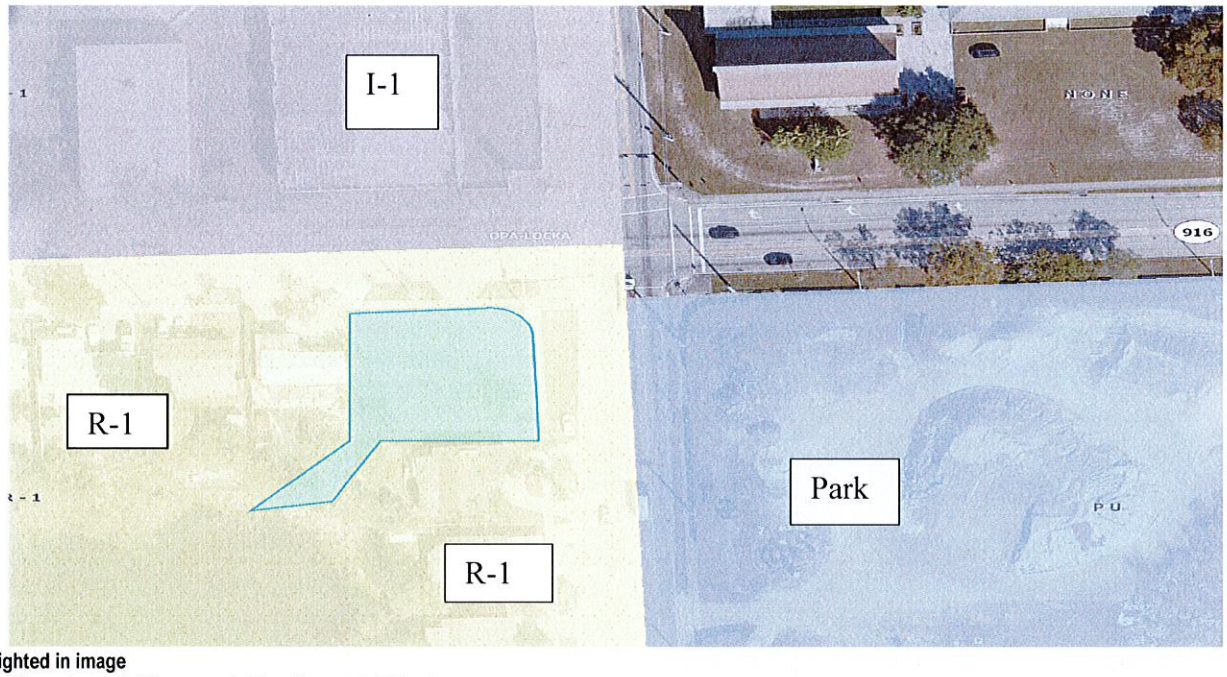
PZAB SITE PLAN APPROVAL CRITERIA-(Per Ordinance 15-31, Sec. 22-55, B Approval Criteria)

1. The development permitted by the application, if granted, conforms to the Comprehensive Plan; is consistent with applicable area or neighborhood studies or plans, and would serve a public benefit warranting the granting of the application at the time it is considered.
2. The development permitted by the application, if granted, will have a favorable or unfavorable impact on the economy of the City.
3. The development permitted by the application, if granted, will efficiently use or not unduly burden water, sewer, solid waste disposal, recreation, education or other necessary public facilities which have been constructed or planned and budgeted for construction.

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT: SITE PLAN ANALYSIS

The development if approved conforms to the Comprehensive Plan.
The development if approved will have a favorable impact on the economy of the City.
The development if approved will efficiently use or not unduly burden water, sewer, solid waste disposal, recreation, education or other necessary public facilities which have been constructed or planned and budgeted for construction.

Surrounding Zoning Designation Map



The Site is highlighted in image

Surrounding Land Use and Zoning: Table 2

Location	Existing Land Use	Future Land Use (FLU)	Zoning
North	Commercial/Residential	Commercial/Residential	B-O to B-2/ R-1 R-2
South	Residential	Residential	R-TH
East	N/A	N/A	N/A
West	Residential	Residential	R-1

COMPLIES

- **General Character / Neighborhood Compatibility:** The proposed development use will be in Harmony with the general character of the surrounding neighborhood considering population density, design, scale, and bulk of any proposed new structures, intensity and character of activity, traffic and parking conditions?
  - **Findings:**
    - The propose development use 'to construct a twin home on this site is in harmony with the general characteristic of the surrounding neighborhood: Single Family Uses

- **Tree Preservation:** Compliance with Tree Preservation Ordinance required pursuant to City ORDINANCE NO.10-03

COMPLIES

  - **Findings:**
    - The Applicant is proposing to include landscaping for an area of 2,206 square feet. *(Please see attached Landscape Plan for Trees detailed information*).

- **Fence:** All fences constructed on property perimeters shall be in accordance with the requirements of the Land Development Regulation Section 22-134., however if additional walls, fences or hedges are installed they shall also comply with the requirements of this Section.
  - **Findings:**
    - The Applicant may install a fence in accordance with the LDR.

COMPLIES

- **Future Land Use:** Low Density Residential.

- **Findings:**
  - According to the City of Opa-locka Comprehensive Plan; the proposed project shall be located within the City's Low Density Residential LU category location which is appropriate for single family and duplex uses.

COMPLIES

- **R-1 (Single-Family) Permitted Uses:** Project Specific: *Construction of a twin home on this vacant site.*
  - **Findings:**
    - According to the City's Land Development Regulation/ Zoning Code R-1 (Single-Family) zoning district would permit this use, if special exception review is approved by the City Commission. This use is compatible with the zoning of the proximal zoning district.

- **Community Comments/Petitions:** The Applicant verbally informed the Planning and Community development Department that petitions were submitted to the surrounding businesses for signatures, comments or possible opposition.
  - **Findings:** The Planning and community Development Department has not received signed petitions submitted to the Neighboring Businesses as indicated by the Applicant.

COMPLIES

III. Project Need Assessment / other Required Approvals

1. Special Exception Review 3. Site Plan Review
   Application(s) submitted for Planning & Zoning Board Meeting (this meeting) Tuesday, December 5th, 2023

IV. Development Review Committee (DRC): *Meeting Review Comments*

1. **Capital Improvement Project (CIP):**
   - No issues reported for the proposed Site Plan
2. **Building:**
   - N/A
3. **Police:**
   - N/A
4. **Community Redevelopment Agency (CRA):**
   - N/A
5. **City Manager's Office (CMO):**
   - N/A
6. **Code Enforcement:**
   - N/A
7. **City Attorney's Office:**
   - Development Agreement under review
8. **Public works:**
   - N/A
9. **Inter-jurisdictional Review:**
   - N/A

V. Staff Recommendation:

- Staff recommend approval of the Special Exception Review and the Site Plan Review.

Attachments:

- Site Plan

Planning and Community Development Department

	Name and Title	Initials
Project Planner	Randall Robinson, City Planner	
Zoning	Gerald J. Lee, Zoning Official	
Economic Development	Solomon Bankole, Manager	
Approved by	Gregory D. Gay, Director Planning and Community Development	

I. **Planning and Zoning Board Decision:** (PLEASE SEE MEETING MINUTES FOR DETAIL DISCUSSIONS)

Resolution No. 2023-12-12-04,

A RESOLUTION OF THE PLANNING & ZONING BOARD OF THE CITY OF OPA-LOCKA, FLORIDA, RECOMMENDING APPROVAL OR DENIAL OF THE FINAL SITE PLAN REVIEW REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the applicant has appeared before this Board for the request in the application, and all evidence, documents and exhibits have been received and marked pursuant to the Code of Ordinance of the City of Opa-locka.

NOW, THEREFORE, IT IS RESOLVED AS FOLLOWS:

1) That the request in the application by the applicant be and the same is hereby

a. APPROVED ☐ DATE: 12-12-2023

b. DENIED ☐

c. NOT DETERMINE ☐ until additional consideration at the regular meeting to be held on__ / __ / ___

2) That the following special condition be and they are hereby imposed, conditioning the determination aforementioned:

a.

b.

*** The Planning and Zoning Board Approval of this request was approved by a - vote***

I HEREBY CERTIFY that the resolution containing the determination of this Board is a true and correct copy as is reflected upon the public records of the City of Opa-locka this day of

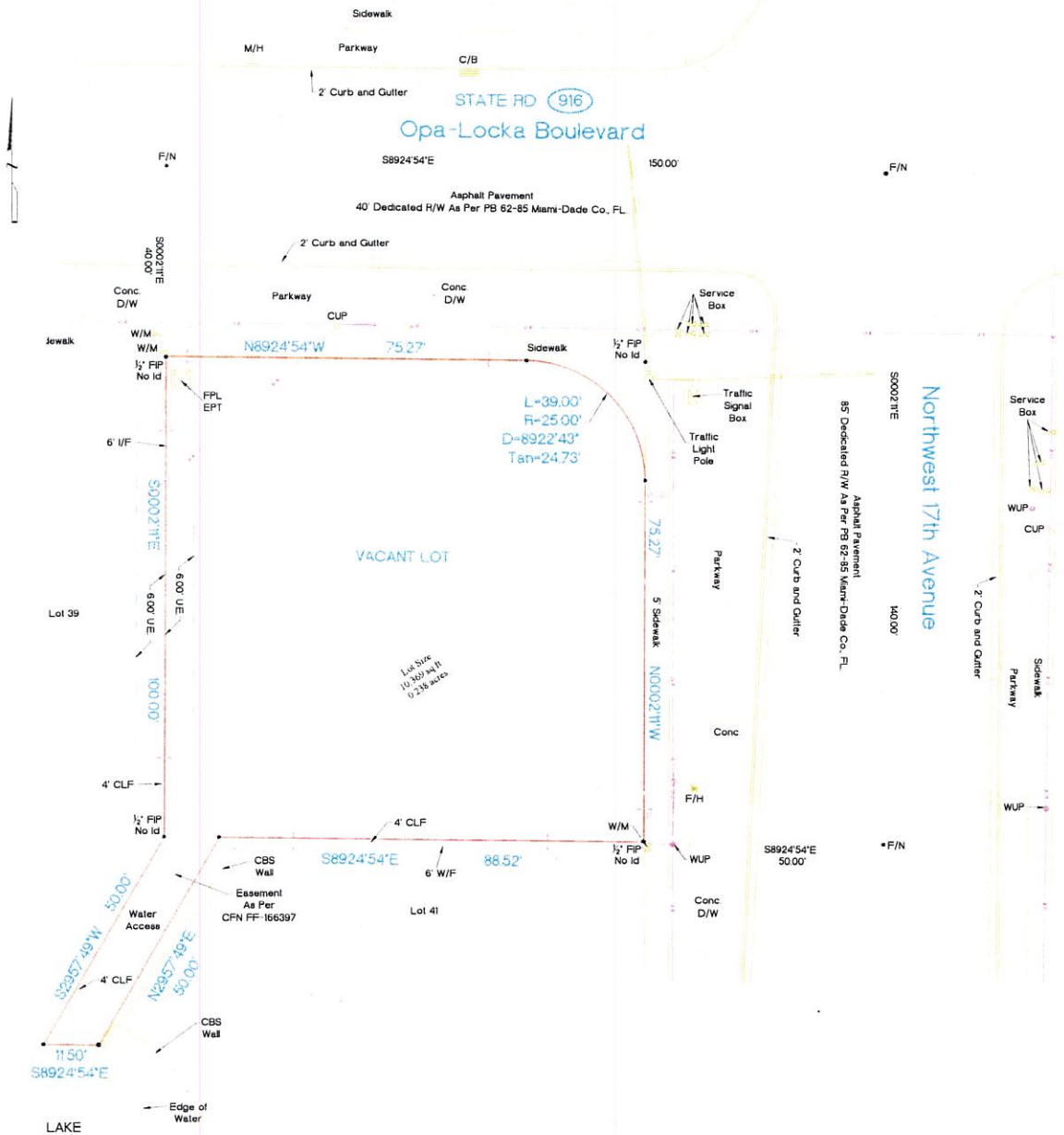
_____

Chairperson or Designee

The Following changes/recommendations are updates based on the Planning and Zoning Board Meeting discussions in regards to the proposed construction of a twin home building on this vacant property.

Boundary Survey

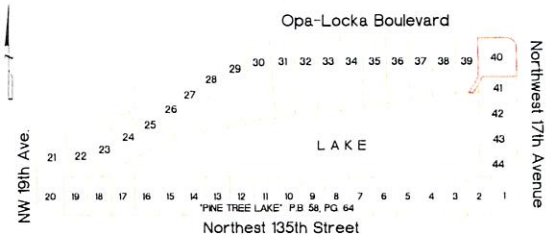
Graphic Scale 1" = 10'



Abbreviations of Legend

AVE	AVENUE
ASPH	ASPHALT
A/C	AIR CONDITIONER
BLDG	BUILDING
B. CHA	BLOCK CORNER
CAL	CALCULATED
C.B	CATCH BASIN
C.L.F	CHAIN LINK FENCE
CONC	CONCRETE
CSW.	CALCULATED
C.U.P	CONCRETE UTILITY POLE
C.L.P	CONCRETE LIGHT POLE
CBS	CONCRETE BLOCK STRUCTURE
C.M.E	CANAL MAINTENANCE EASEMENT
D	DELTA
D/W	DRIVEWAY
D.M.E	DRAINAGE & MAINTENANCE EASEMENT
ENC	ENCROACHMENT
E.C.F	ELEVATION CERTIFIED FLOOD
F.P.L	FLORIDA POWER AND LIGHT
F.H.	FIRE HYDRANT
F.I.P	FOUND IRON PIPE
F.F	FINISH FLOOR
FIRF	FOUND DRILL HOLE
F.R	FOUND REBAR
F.D	FOUND DISC
F.N	FOUND NAIL
I.F	IRON FENCE
L	LENGHT
L.M.E	LAKE MAINTENANCE EASEMENT
L.F.F	LOWEST FLOOR ELEVATION
L.P	LIGHT POLE
M.H.W	MEAN HIGH WATER
M.H	MAN HOLE
M.L	MEASUREMENT LINE
N.G.V.D	NATIONAL GEODETIC VERTICAL DATUM
N.T.S	NOT TO SCALE
O.E	OVERHEAD ELECTRIC LINE
O.L	ON LINE
P.C.P	PLATTED CONTROL POINT
P.M	PARKING METER
P.C	POINT OF CURVATURE
P.W	PARKWAY
PL	PLANTER
P.O.C	POINT OF COMMENCEMENT
P.O.B	POINT OF BEGINNING
R	RADIUS
REB	REBAR/SET
R/W	RIGHT OF WAY
S.D.H	SET DRILL HOLE
SN	SET NAIL
S.I.F	SET IRON PIPE
SIDEWALK	SIDEWALK
ST	STREET
T	TANGENT
U.E	UTILITY EASEMENT
W.F	WOOD FENCE
W.V	WATER VALVE
W.U.P	WOOD UTILITY POLE
	WOOD FENCE
	IRON FENCE
	CBS WALL
	CHAIN LINK FENCE
	WOOD SHED
	CONCRETE
	ASPHALT
	CALCULATED
	DESCRIPTION DISCREPANCY
	BUILDING
	DISTANCE
	CATCH BASIN
	WATER METER
	W.F
	STATE ROAD
	US HIGHWAY
	INTERSTATE
	MONITORY WELL

Location Sketch N.T.S.



LEGAL DESCRIPTION:
Lot 40 and the following described portion of Lots 39 and 41; Commence at the Northwest corner of Lot 40, thence run S00°02'11"E, along the West line of Lot 40, for 100 feet to the Southwest corner of Lot 40 and the Point of Beginning of the parcel of land hereinafter to be described; thence run S29°57'49"W for 50 feet, more or less to the shoreline of a lake, thence run Easterly along said shoreline for 11.5 feet more or less, thence run N29°57'49"E for 50 feet more or less to a point on the South line of Lot 40, thence run N89°24'54"W, along the South line of Lot 40 for 11.48 feet to the Point of Beginning, all lying in "FIRST ADDITION TO PINE TREE LAKE", according to the Plat Thereof as Recorded in Plat Book 62, Page 85, of the Public Records of Miami-Dade County, Florida.

CERTIFIED ONLY TO:
DMG Investment Trust LLC

PROPERTY ADDRESS:
13600 Northwest 17th Avenue
Opa-Locka Florida 3354

ELEVATION INFORMATION
National Flood Insurance Program
FEMA Elev. Reference to NGVD 1929

Comm Panel	120650
Panel #	0314
Firm Zone	"X"
Date of Firm	09-11-2009
Base Flood Elev	N/A
F Floor Elev	N/A
Garage Elev	N/A
Suffix	"L"
Elev. Reference to NGVD 1929	

JOB #	23-1128
DATE	09-21-2023
PB	62-85

Surveyors Notes

Surveyor's Notes

AFA & Company, Inc

Professional Surveyors & Mappers LB 7498
13050 S.W. 133rd Court
Miami Florida, 33186
E-mail afasco@bellsouth.net
Ph. (305) 234-0588

Armando Alvarez

+ SITE INFORMATION

OWNER	DMG INVESTMENT TRUST LLC
FOLIO NUMBER	08-2122-018-0200
LOT AREA	10,575 Sq Ft
ADDRESS	13600 NW 17 Ave
LEGAL DESCRIPTION	PB 62-85 1ST ADDN TO PINE TREE LAKE LOT 40 PORT LOTS 39 41 BEG AT NW COR LOT 40 N90FT S 29 DEG W90FT NELY 11 9FT N 29 DEG E50FT E 88.52FT N160FT W160FT TO POB LOT SIZE 10575 SQUARE FEET COC 23090 1810 02 2003 6

+ LOCATION



+ ZONING DATA:

ZONING R-1

LOT SIZE 10,575 Sq Ft

	REQUIRED	EXISTING	PROPOSED
LOT COVERAGE	35%	—	2,252 Sq / 22%

SETBACKS

	REQUIRED	EXISTING	PROPOSED
FRONT	25 Ft	25 Ft	25 Ft
INTERIOR SIDE	7.5 Ft	—	23.8 Ft
SIDE FACING STREET	15 Ft	—	25.8' Ft
REAR	25 Ft	—	30.1' Ft

+ SITE INVESTIGATION NOTE

EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF WORK. THE BIDDER IS REQUIRED BEFORE SUBMITTING HIS PROPOSAL TO VISIT THE SITE OF THE PROPOSED WORK AND FAMILIARIZE HIM OR HERSELF WITH THE NATURE AND EXTENT OF THE WORK, AND ANY LOCAL CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND EQUIPMENT, MATERIALS AND LABOR ALL OTHER BUILDING SINCE THE WORK INVOLVES NEW AND OR EXISTING BUILDINGS SYSTEMS AND FACILITIES, SPECIAL CONSIDERATION SHALL BE GIVEN TO EXAMINATION OF WORKING CONDITIONS. NEW FACILITIES AND ALL BUILDING STRUCTURES FAMILIARIZE TO HIMSELF WITH ALL EXISTING CONDITIONS SLIGHT VARIATION OF SCATTERING AND OR CLOSE STRUCTURES SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES. THESE VARIATIONS ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHETHER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. AGREEMENT ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITY ASSUMED UNDER THIS CONTRACT

+ ALTERATION PROJECT PROCEDURES

REQUIREMENTS INCLUDED

COORDINATE WORK OF TRADES AND SCHEDULE ELEMENTS OF ALTERATIONS AND RENOVATION WORK BY PROCEDURES AND METHODS TO EXPEDITE COMPLETION OF THE WORK.

CUT, MOVE OR REMOVE ITEMS AS NECESSARY TO PROVIDE ACCESS OR TO ALLOW ALTERATIONS AND NEW WORK TO PROCEED INCLUDES BUT NOT LIMITED AS

- REMOVAL OR REMOVAL OF HAZARDOUS OR UNSAFETY CONDITIONS

- REMOVAL OF ABANDONED ITEMS AND ITEMS SERVING NO USEFUL PURPOSE, SUCH AS ABANDONED PIPING CONDUIT AND WIRING

- REMOVAL OF UNSUITABLE OR EXTRANEOUS MATERIALS NOT MARKED FOR SALVAGE, SUCH AS ABANDONED EQUIPMENT AND DEBRIS INCLUDING BOTTLED WOOD, BOTTLED METALS AND DETERIORATED CONCRETE.

ALTERATIONS AND COORDINATION OF NEW CONSTRUCTION TO EXISTING CONSTRUCTION OCCUR AT DUST SENSITIVE AREAS, EXECUTE ALL MEASURES TO COMPLETELY CONTROL AND SEPARATE DUST FROM EXISTING AREA AND EQUIPMENT

+ TERMITE PROTECTION

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

+ GENERAL SCOPE OF WORK

WORK ENCOMPASSED UNDER THIS SET OF CONTRACT DOCUMENTS INCLUDES THE CONSTRUCTION OF THE NEW ONE STORY RESIDENTIAL HOUSE

NEW CONSTRUCTION

GROUND FLOOR _____ 1 FROM SqFt

+ NOTE

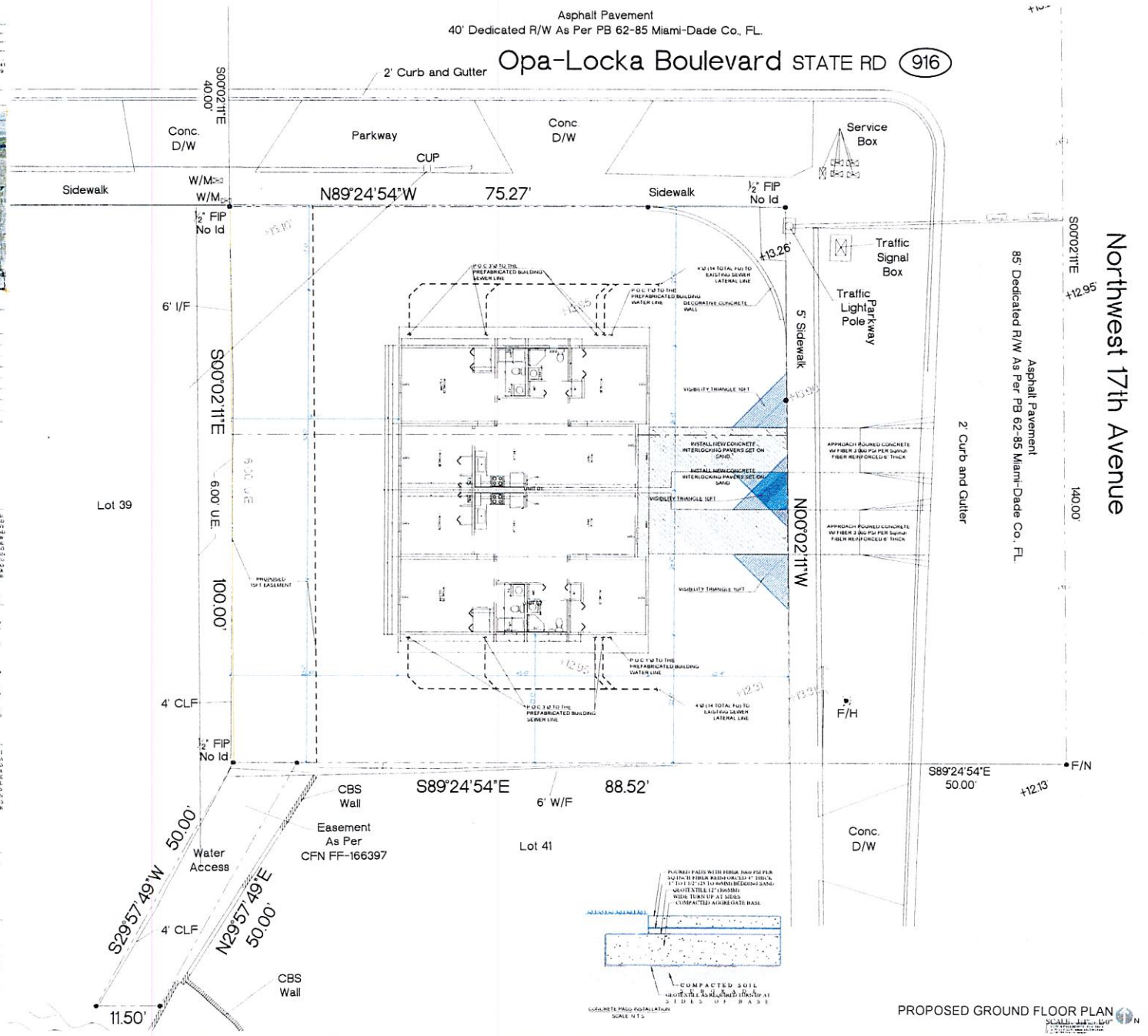
CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF THE PROJECT

CONTRACTOR TO PROVIDE ALL THE COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING PROJECT, EVEN IF NOT INCLUDED IN THE CONSTRUCTION DOCUMENTS

ALTHOUGH IT IS UNDERSTOOD THAT THE CONTRACTOR IS NOT A LICENSED DESIGN PROFESSIONAL, THE CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND LOCATIONS OF ALL WITH ARCHITECTURE AND ALL DISCIPLINES INCLUDED IN THESE CONSTRUCTION DOCUMENTS

THE CONTRACTOR AGREES TO PROMPTLY ADVISE THE ARCHITECT OF ANY NONCONFORMITY OBSERVED BY OR MADE KNOWN TO THE CONTRACTOR

SEE CONSTRUCTION NOTES ON SHEET A0.01 FOR FURTHER INSTRUCTIONS



PROPOSED GROUND FLOOR PLAN

SCALE: 1/4"=1'-0"

nandezD+D
design+development

PROJECT

13600 NW 17 AVE

OWNER

DMG INVESTMENT TRUST LLC

ARCHITECT

NANDEZ Design+Development
2223 SW 13th AVE
MIAMI, FL 33145
tel 786 703 7764
info@nandezd.com
AA 26002732
IB 26001520

SEAL

ARCHITECT OF RECORD
RALPH PUIG JR
FL ARCHITECT REG #
AR 0012520

REWORKS

1. 2. 3. 4. 5. 6. 7. 8.

REVISIONS

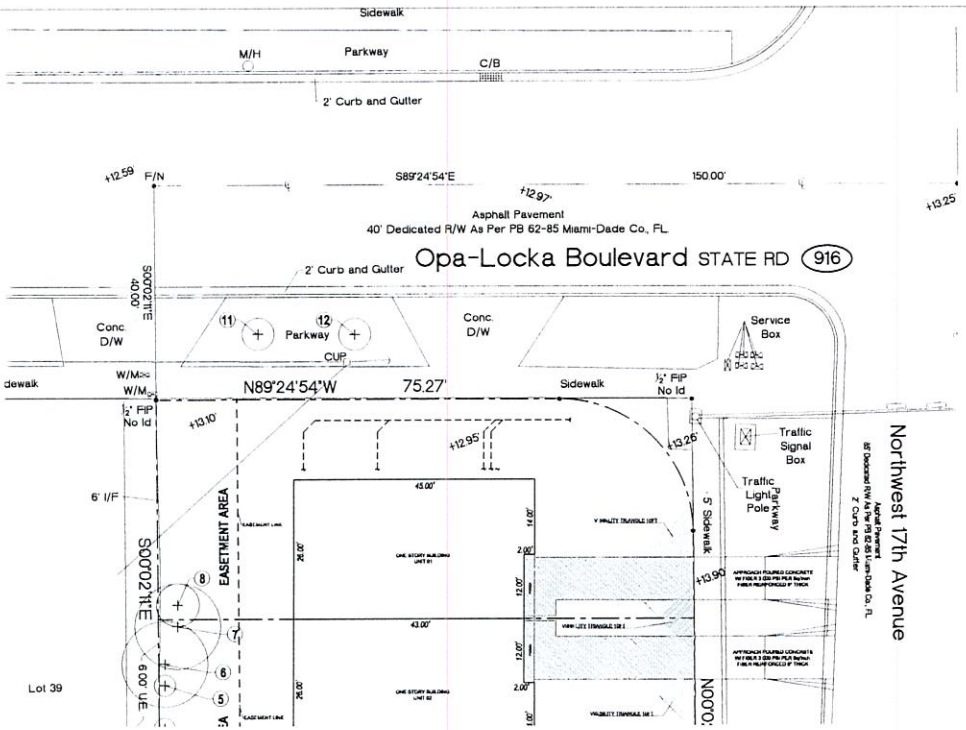
1. 2. 3. 4. 5. 6. 7. 8.

INFORMATION

PROPOSED SITE PLAN

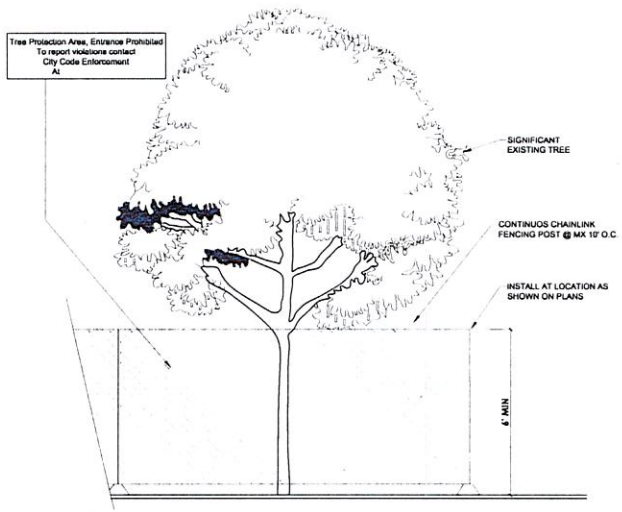
DATE	10/11/2021
Scale	AS SHOWN
Job No	2021/
Drawn by	RP
Checked by	RP Jr

Sheet A101



EXISTING TREE DISPOSITION (UNIT 01)

SCALE: 3/32"=1'-0"



1. MINIMUM SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING AND COVERED WITH SOIL AS SOON AS POSSIBLE.
3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.
4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE

TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
8	*Ficus benjamina*	weeping fig	2	25	4	Poor	2	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN
11	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	6	Good	4	YES	REMAIN
12	*Conocarpus erectus var. sericeus*	silver buttonwood tree	4	12	8	Good	4	YES	REMAIN

NOTE
The trees #2, #3, #4, #5, #6, #7 & #8 shall be remain because they are in the Easement Area.

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:09:45 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT

NOTES;
-THE APPROXIMATE LOCATION, SIZE AND CONDITIONS OF THE EXISTING TREES/PALMS WITHIN THE PROJECT LIMITS HAS BEEN COLLECTED FROM THE EXISTING ARBORIST REPORT PREPARED BY PEDRO J. PARTIDAS CORDERO, CERTIFIED ISA ARBORIST ISA FL-9963A, PH: 786-218-8478
-EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION (SEE DETAIL 1)
-CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT PRIOR TO THE REMOVAL OF TREES / PALMS PROPOSED TO BE REMOVED
-CONTRACTOR TO REMOVE ALL EXISTING SHRUBS AND GROUNDCOVERS UNLESS NOTED IN LANDSCAPE PLAN AS EXISTING TO REMAIN



LOCATION MAP

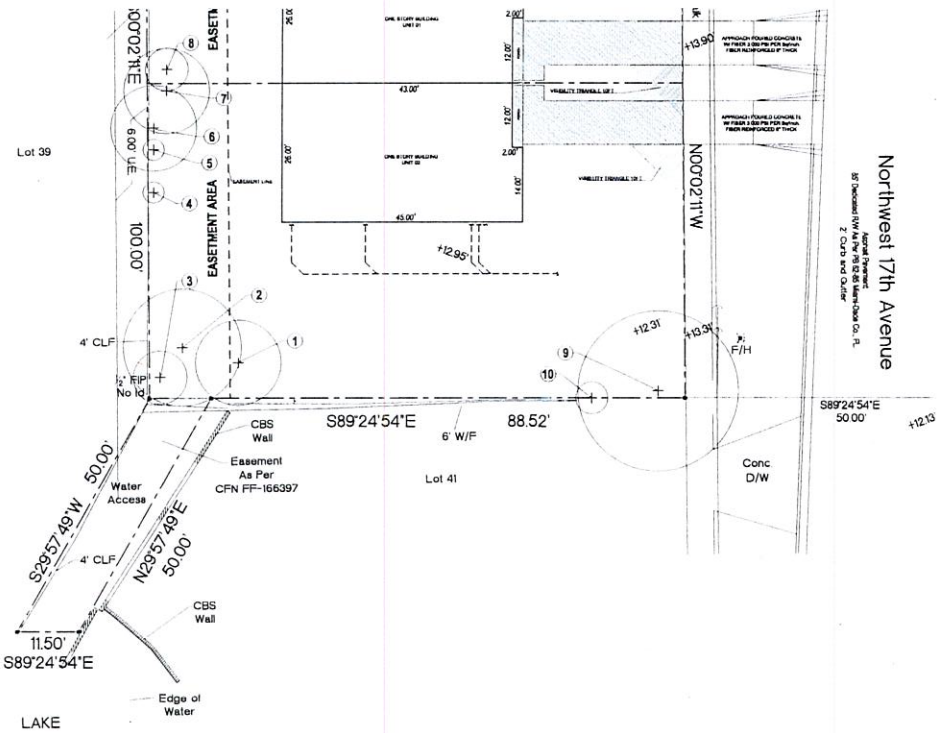
RPA
RALPH PUIG ARCHITECT
ARCHITECTURE · PLANNING · INTERIOR DESIGN
LATITUDE ONE INTL. BUSINESS CTR.
175 SW 7th ST. / Suite 1712
Miami, FL 33130
305 - 731 - 1770 phone
Fl. Architect Registration AR 0012528

project: LANDSCAPE PLANNING
property ID: 08-2122-018-0200
owner: DMG INVESTMENTS TRUST LLC
address: 13600 NW 17th AVENUE
OPA-LOCKA BOULEVARD
rework: rework #1 · rework #2 · rework #3 · rework #4 · rework #5 · rework #6
revisions: revision #1 · revision #2 · revision #3 · revision #4 · revision #5 · revision #6
architect: Ralph Puig Jr. AR:12528
seal:
model:

EXISTING TREE DISPOSITION UNIT 01

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-001

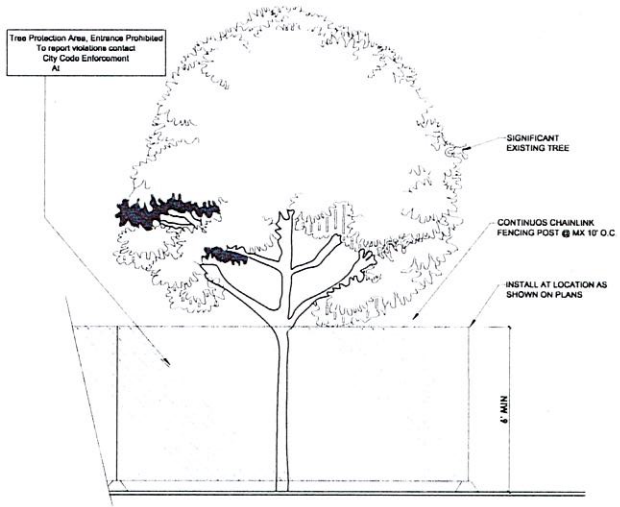
DATE PLOTTED: Aug 23, 2023 AtDate FILENAME: 13600 NW 17 AVENUE.dwg Person Plotting: Author User
THESE PLANS AND DRAWINGS FOR THE BUILDING AND/OR OVERALL PROJECT ARE THE LEGAL PROPERTY OF AND ALL RIGHTS ARE RESERVED BY THE ARCHITECT. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY ARCHITECT



EXISTING TREE DISPOSITION UNIT 02

SCALE: 3/32"=1'-0"

N



1. MINIMUM SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING AND COVERED WITH SOIL AS SOON AS POSSIBLE.
3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL
4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE

TREE PROTECTION FENCING DETAIL
(for public and private trees)

NOTES;
- -THE APPROXIMATE LOCATION, SIZE AND CONDITIONS OF THE EXISTING TREES/PALMS WITHIN THE PROJECT LIMITS HAS BEEN COLLECTED FROM THE EXISTING ARBORIST REPORT PREPARED BY PEDRO J. PARTIDAS CORDERO, CERTIFIED ISA ARBORIST ISA FL-9963A, PH: 786-218-8478
- -EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION (SEE DETAIL 1)
- -CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT PRIOR TO THE REMOVAL OF TREES / PALMS PROPOSED TO BE REMOVED
- -CONTRACTOR TO REMOVE ALL EXISTING SHRUBS AND GROUNDCOVERS UNLESS NOTED IN LANDSCAPE PLAN AS EXISTING TO REMAIN

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN

NOTE
The trees #2, #3, #4, #5, #6 & #7 shall remain because they are located within the Easement Area.

Ralph Puig
Digitally signed by Ralph Puig
Date: 2023.08.24 09:07:21 -04'00'

STATE OF FLORIDA · RALPH PUIG JR · AR0012528 · REGISTERED ARCHITECT



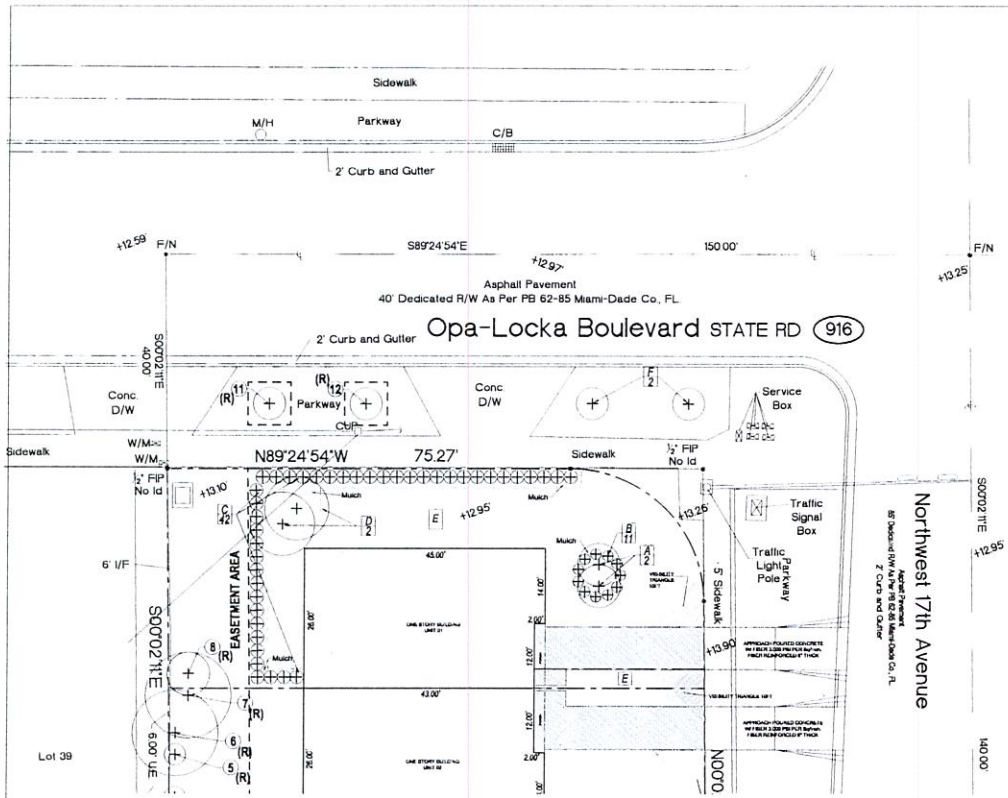
RPA
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175 SW 7th ST / Suite 1712
Miami, FL 33130
305-731-1770 phone
Fl. Architect Registration AR 0012528

project: LANDSCAPE PLANNING
project ID:
owner:
address: 13600 NW 17th AVENUE
OPA-LOCKA BOULEVARD
rework #1
rework #2
rework #3
rework #4
rework #5
rework: rework #6
revision #1
revision #2
revision #3
revision #4
revision #5
revision #6
revisions:
architect:
seal:
project:

EXISTING TREE DISPOSITION UNIT 02

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-001

DATE PLOTTED: Aug 23, 2023 - 2:26pm FILENAME: 1300 NW 17 AVENUE.dwg Paper Plotting AUTOCAD VERSION: Autodesk Architectural Desktop 2007 DRAWING FOR THIS BUILDING AND / OR OVERALL PROJECT ARE THE LEGAL PROPERTY OF AND ALL RIGHTS ARE RESERVED BY THE ARCHITECT. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY ARCHITECT



PROPOSED LANDSCAPE PLAN (UNIT 01)

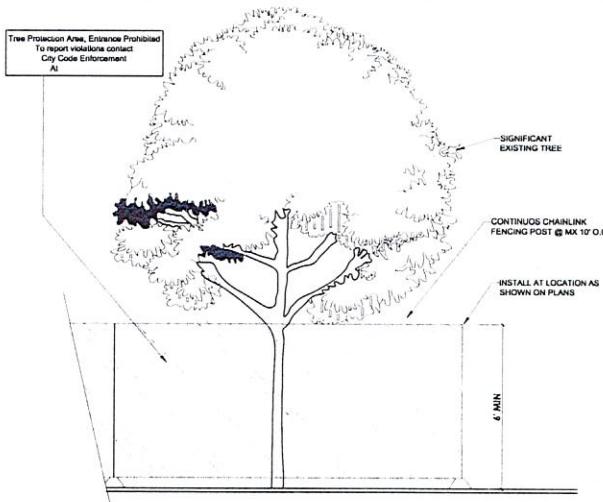
SCALE: 3/32"=1'-0"

N

LEGEND	
MARK	DESCRIPTION
+	TREE OR PALM NUMBER
[ ]	TREE PROTECTION FENCE
X (R)	EXISTING TREE TO REMAIN
X / X	TREE CODE / QTY. OF TREES

LANDSCAPE LEGEND / PROPOSED

CODE	SCIENTIFIC NAME	COMMON NAME	QTY	DROUGHT TOLERANCE	NATIVE	SPECIFICATIONS	CONTAINER SIZE	SPACING
PALMS								
A	*Phoenix roebelenii*	pygmy date palm	2	MEDIUM	NO	7' HT. x 6' SPR	F.G.	AS SHOWN
D	*Veitchia montgomeriana*	montgomery palm	2	MEDIUM	NO	14' HT. x 12' SPR	F.G.	AS SHOWN
SHRUBS & GROUNDCOVERS								
B	*Hamelia patens*	firebush	11	MEDIUM	YES	24"' HT. x 24" SPR	3 GAL.	30" O.C
C	*Clusia flava*	small leaf clusia	42	HIGH	YES	36" HT. x 30" SPR	7 GAL.	30" O.C
E	*stenotaphrum secundatum*	St. Augustine grass	1351 SQF		YES	staggerd panels		
TREES								
F	*Conocarpus erectus var. sericeus*	silver buttonwood tree	2	MEDIUM	YES	7' HT. x 6' SPR	F.G.	AS SHOWN



1. MINIMUN SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED FENCE SHALL COMPLETELY ENCIRCLE TREE(S) INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
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4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE

TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME
8 (R)	*Ficus benjamina*	weeping fig

NOTE
The tree #8 shall remain because it is in the Easement Area.

CALCULATIONS AREAS

ZONING DISTRICT: R-1
LOT AREA ----------3967 SF ----0.091 ACRES
EASEMENT AREA ---------615 SF
NET LOT AREA ----------3967 - 615 = 3352 SF
NET OPEN SPACE : 2206 SF

TREE
PROVIDED IN THE LOT ------ 4
EXISTING STREET TREE ------ 2
STREET TREE PROVIDED------ 2
TOTAL TREES------ 8

SHRUBS
PROVIDED ----------53

IRRIGATION PLAN PROVIDED: AUTO IRRIGATION

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:05:41 -04'00'

STATE OF FLORIDA — RALPH PUIG JR — AR0012528 — REGISTERED ARCHITECT



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
ARCHITECTURE PLANNING INTERIOR DESIGN
LATITUDE ONE INTL. BUSINESS CTR.
179 SW 7th ST. / Suite 1712
Miami, FL 33130
305 - 731 - 1770 phone
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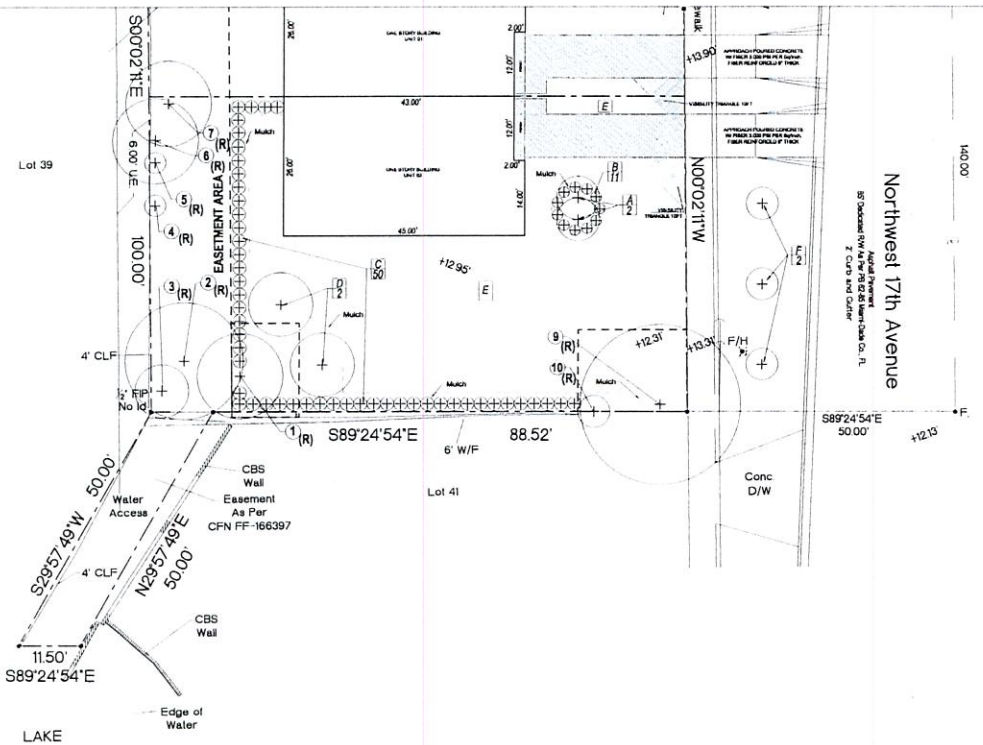
reviews	rework #1
	rework #2
	rework #3
	rework #4
	rework #5
	rework #6
revisions	revision #1
	revision #2
	revision #3
	revision #4
	revision #5
	revision #6

architect: Ralph Puig Jr. AR:12528
seal:
initials:

PROPOSED LANDSCAPE PLAN UNIT 01

date: 08/10/2023
scale: as shown
checked by: RP
sheet: L-002

DATE PLOTTED: Aug 23, 2023 - 2:31pm FILENAME: 1800 NW 17 AVENUE.dwg Paper Plotted: Arch-C Unit
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY ARCHITECT
ALL RIGHTS ARE RESERVED BY THE ARCHITECT. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY ARCHITECT
THE LEGAL PROPERTY OF AND ALL RIGHTS ARE RESERVED BY THE ARCHITECT. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY ARCHITECT



LEGEND	
MARK	DESCRIPTION
(+)	TREE OR PALM NUMBER
[ ]	TREE PROTECTION FENCE
X (R)	EXISTING TREE TO REMAIN
X/X	TREE CODE QTY. OF TREES

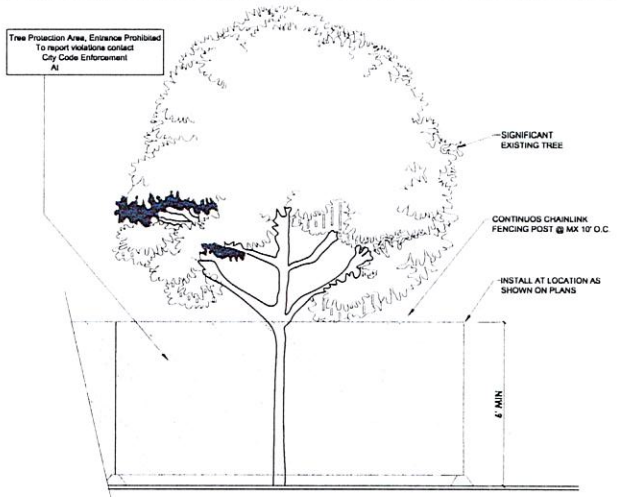
PROPOSED LANDSCAPE PLAN (UNIT 02)

N

SCALE: 3/32"=1'-0"

LANDSCAPE LEGEND / PROPOSED

CODE	SCIENTIFIC NAME	COMMON NAME	QTY	DROUGHT TOLERANCE	NATIVE	SPECIFICATIONS	CONTAINER SIZE	SPACING
PALMS								
A	*Phoenix roebelenii*	pygmy date palm	2	MEDIUM	NO	7' HT. x 6' SPR	F.G.	AS SHOWN
D	*Veitchia montgomeriana*	montgomery palm	2	MEDIUM	NO	14' HT. x 12' SPR	F.G.	AS SHOWN
SHRUBS & GROUNDCOVERS								
B	*Hamelia patens*	firebush	11	MEDIUM	YES	24"' HT. x 24" SPR	3 GAL.	30" O.C
C	*Clusia flava*	small leaf clusia	50	HIGH	YES	36" HT. x 30" SPR	7 GAL.	30" O.C
E	*stenotaphrum secundatum*	St. Augustine grass	2633 SQF		YES	staggerd panels		
TREES								
F	*Conocarpus erectus var. sericeus*	silver buttonwood tree	3	MEDIUM	YES	7' HT. x 6' SPR	F.G.	AS SHOWN



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TREE PROTECTION FENCING DETAIL
(for public and private trees)

LANDSCAPE LEGEND / EXISTING TREE

No.	BOTANICAL NAME	COMMON NAME	DBH (Inch)	HEIGHT (Ft)	CANOPY (Ft)	CONDITION	CRZ/TPZ (Ft)	NATIVE	STATUS
1	*Cocos nucifera*	coconut tree	11	36	16	Fair	11	NO	REMAIN
2	*Ficus aurea*	Florida strangler fig	7	32	22	Fair	7	YES	REMAIN
3	*Ficus aurea*	Florida strangler fig	4	32	10	Fair	4	YES	REMAIN
4	*Ficus benjamina*	weeping fig	4	32	4	Poor	4	NO	REMAIN
5	*Ficus benjamina*	weeping fig	3	32	4	Poor	3	NO	REMAIN
6	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
7	*Ficus benjamina*	weeping fig	5	32	16	Poor	5	NO	REMAIN
9	*Cocos nucifera*	coconut tree	14	40	30	Good	14	NO	REMAIN
10	*Veitchia merrillii*	christmas palm	3	16	6	Poor	3	NO	REMAIN

NOTE
The trees #2, #3, #4, #5, #6 & #7 shall remain because they are located within the Easement Area.

CALCULATIONS AREAS

ZONING DISTRICT: R-1
LOT AREA : ——————6399 SF ——0.14 ACRES
EASEMENT AREA ——— 1385 SF
NET LOT AREA——6399 SF - 1385 SF = 5014 SF
NET OPEN SPACE : 3878 SF

TREE
PROVIDED IN THE LOT ——— 4
STREET TREE PROVIDED—— 3
TOTAL TREES—— 7

SHRUBS
PROVIDED ——————61

IRRIGATION PLAN PROVIDED: AUTO IRRIGATION

Ralph Puig

Digitally signed by Ralph Puig
Date: 2023.08.24 09:12:22 -04'00'

STATE OF FLORIDA — RALPH PUIG JR — AR0012528 — REGISTERED ARCHITECT



LOCATION MAP

RPA
RALPH PUIG ARCHITECT
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project
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rework #2
rework #3
rework #4
rework #5
rework #6
rework
revision #1
revision #2
revision #3
revision #4
revision #5
revision #6
revision
architect
seal
model

PROPOSED
LANDSCAPE PLAN
UNIT 02

date: 08/10/2023
scale: as shown
checked by: RP
sheet L-002

DATE PLOTTED: Aug 24, 2023 Time: 09:12:22 FILENAME: L-002 UNIT 11.RVT PLOTTED BY: Ralph Puig
DRAWINGS FOR THIS BUILDING ARE NOT TO BE USED FOR OTHER PROJECTS OR ADDITIONS TO THIS PROJECT
Planning / Interior Design
THESE DRAWINGS AND SPECIFICATIONS ARE THE LEGAL PROPERTY OF AND ALL RIGHTS ARE RESERVED BY THE ARCHITECT. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY ARCHITECT

Sponsored by Interim City Manager

ORDINANCE NO. 2024-XX

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1)), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions including those relating to Comprehensive Planning, and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, Section 2.5 of the City Charter of the City of Opa-Locka ("City") empowers the City Commission to adopt, amend, or repeal such ordinances as may be required for the proper governing of the City; and

WHEREAS, pursuant to F.S. 163.3191(1), at least once every 7 years ("Evaluation and Appraisal Cycle"), each local government shall evaluate its comprehensive plan to determine if plan amendments are necessary to reflect changes in state requirements in Part II of Chapter 163, Florida Statutes, since the last update of the local government's comprehensive plan, and notify the state land planning agency as to its determination; and

WHEREAS, City of Opa-Locka City Commission recognizes that, periodically, it is necessary to amend the City Comprehensive Development Master Plan (the "Plan") in order to ensure that the Plan is current and consistent with the City's planning and regulatory needs; and

WHEREAS, the City Commission finds that the proposed evaluation and appraisal based text amendments, attached hereto as Exhibit "A", and incorporated herein by reference, will help strengthen the City's long-term ability to protect its residential neighborhoods and improve overall community character and quality of life; and

WHEREAS, the City Commission desires to comply with state law and adopt the text amendments to the City's Comprehensive Plan in the form prescribed by law; and

WHEREAS, notice was publicly advertised as required by City and State regulations regarding text amendments to the Comprehensive Plan; and,

WHEREAS, on December 12, 2023, the Planning and Zoning Appeals Board, as the local planning agency for the City held its hearing on this proposed Ordinance with due public notice and input, and recommended its adoption by a 5-0 vote; and

WHEREAS, on January 10, 2023, the City Commission held a first reading and public hearing of this proposed Ordinance; and

WHEREAS, the City Commission voted to transmit the proposed evaluation and appraisal based text amendments to the Comprehensive Plan to state agencies, after first reading, for review pursuant to Section 163.3184(3)(b), Florida Statutes; and

WHEREAS, on XXXXX XX, 2024, the City Commission held a second reading and public reading of this proposed Ordinance with due public notice and input; and

WHEREAS, the City Commission of the City of Opa-Locka, Florida, finds that it is in the best interest of the City and its residents amended the City Comprehensive Plan to incorporate the proposed text amendments, pursuant to Section 163.3184, Florida Statutes, as provided in Exhibit "A".

NOW, THEREFORE, IT IS HEREBY ORDAINED BY THE CITY OF OPA-LOCKA, FLORIDA, AS FOLLOWS:

SECTION 1. RECITALS.

The above recitals are true and correct and incorporated into this Ordinance by reference.

SECTION 2. AMENDING THE CITY OF OPA-LOCKA COMPREHENSIVE PLAN.

The City of Opa-Locka, Florida, Comprehensive Plan is hereby amended to incorporate the proposed text amendment, pursuant to Section 163.3184, Florida Statutes, as provided in Exhibit "A".

SECTION 3. SCRIVENER'S ERRORS.

Sections of this Ordinance may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Ordinance may be authorized by the City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. CONFLICT AND REPEALER.

Any provision of any City of Opa-Locka ordinance or regulation which is in conflict with the provisions of this Ordinance is repealed prospectively to the extent of such conflict.

SECTION 5. LIBERAL CONSTRUCTION.

The terms and provisions of this Ordinance shall be liberally construed to affect the purpose for which it is adopted.

SECTION 6. SEVERABILITY.

If any portion of this Ordinance is for any reason held or declared to be unconstitutional, invalid or void, such holding shall not affect the remaining portions of this Ordinance. If this Ordinance shall be held to be inapplicable to any person, property or circumstances, such holding shall not affect the applicability of this Ordinance to any other person, property or circumstances.

SECTION 7. EFFECTIVE DATE.

That pursuant to Florida Law, the Comprehensive Plan amendment(s) adopted by this Ordinance shall not become effective until 31 days after the state land planning agency notifies the local government that the plan amendment package is complete. If timely challenged, an amendment does not become effective until the state land planning agency or the Administration Commission enters a final order determining the adopted amendment to comply.

PASSED FIRST READING this _____ day of _____, 2024.

PASSED SECOND READING this_____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-locka
Agenda Cover Memo

Department Director:	Gregory D. Gay			**Department Director Signature:**		
City Manager:	Darvin Williams			**CM Signature**		
Commission Meeting Date:	January 10, 2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**	**Other**
					X	
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**	**2nd Reading**
					X	X
		X	**Public Hearing:** *(Enter X in box)*		**Yes** / **No**	**Yes** / **No**
					X	X
Funding Source: *Account#:* **N/A**	*(Enter Fund & Dept)* Ex: See Financial Impact section below		**Advertising Requirement:** *(Enter X in box)*		**Yes**	**No**
					X	
ILA Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:** N/A			
		X				
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** Enhance Organizational ☐ Bus. & Economic Dev ■ Public Safety ☐ Quality of Education ☐ Qual. of Life & City Image ■ Communication ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*	
	X					
Sponsor Name	Darvin Williams		**Department: Planning & Community Development**		City Manager	

Short Title:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1)), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

Staff Summary:

Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions including those relating to Comprehensive Planning, and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law. Section 2.5 of the City Charter of the City of Opa-Locka ("City") empowers the City Commission to adopt, amend, or repeal such ordinances as may be required for the proper governing of the City. Pursuant to Florida Statutes, Section, 163.3191(1), at least

once every 7 years ("Evaluation and Appraisal Cycle"), each local government shall evaluate its comprehensive plan to determine if plan amendments are necessary to reflect changes in state requirements in Part II of Chapter 163, Florida Statutes, since the last update of the local government's comprehensive plan, and notify the state land planning agency as to its determination. City of Opa-locka City Commission recognizes that, periodically, it is necessary to amend the City Comprehensive Development Master Plan (the "Plan") in order to ensure that the Plan is current and consistent with the City's planning and regulatory needs. The City Commission finds that the proposed evaluation and appraisal based text amendments, attached hereto as Exhibit "A", and incorporated herein by reference, will help strengthen the City's long-term ability to protect its residential neighborhoods and improve overall community character and quality of life. The City Commission desires to comply with state law and adopt the text amendments to the City's Comprehensive Plan in the form prescribed by law and notice was publicly advertised as required by City and State regulations regarding text amendments to the Comprehensive Plan.

On December 12, 2023, the Planning and Zoning Appeals Board, as the local planning agency for the City held its hearing on this proposed Ordinance with due public notice and input, and recommended its adoption by a 5 – 0 vote, and the City Commission will hold a first reading of this legislation and public hearing of this proposed evaluation and appraisal based text amendments to the Comprehensive Plan on January 10, 2024 at which time the City Commission may agree to approve this legislation and vote to transmit the proposed and will transmit to state agencies for review if approved, after first reading, pursuant to Section 163.3184(3)(b), Florida Statutes. The City Commission will hold a second reading and public reading of this proposed Ordinance with due public notice and input from state agencies for final adoption.

Financial Impact

Approval of the Evaluation and Appraisal Based Amendments to the Opa-Locka Comprehensive Development Master Plan will not provide any negative financial impact.

Proposed Action:

Staff recommended approval of this Ordinance.

Attachment:

Draft Ordinance
CGA Memo -Comprehensive Plan - Evaluation Appraisal Report Amendment Update
Draft 2035-2045 Comprehensive Plan - EAR Amendments
Power Point - Comp Plan Amendments

These blenders might cut you or burn your things. About 4.8 million have been recalled

BY DAVID J. NEAL
dneal@miamiherald.com

A blender should cut fruit, not your skin. Nor should it burn your possessions. So, BlendJet recalled about 4.9 million BlendJet 2 Portable Blenders sold in the United States and Canada.

"The recalled blenders can overheat or catch fire and the blender blades can break off, posing fire and laceration hazards to consumers," the U.S. Consumer Product Commission recall notice states.

That's not an idle concern. The recall notice says BlendJet knows about 329 times the blades broke; 49 times people got burned; one person who got sliced; 17 times the blenders overheated or started fires, causing $150,000 of property damage.



U.S. Consumer Product Safety Commission

BlendJet 2 Portable Blenders have been recalled.

BlendJet wants customers with the blenders, which were sold from October 2020 through this November, to reach out to the company for a free replacement of the base. Do this by cutting the rubber seal on the base into three or more pieces, shoot a photo with the pieces and the serial number on the base and email it to safety@blendjet.com or upload it to the recall website.

To see if this recall concerns your blender, you can go to BlendJet's site and enter your blender's serial number.

For other questions, either go to the recall website hyperlinked above or call BlendJet Monday through Friday, 8 a.m. to 10 p.m., Eastern time at 844-334-0562.

David J. Neal: 305-376-3559, @DavidJNeal

Miami Gardens, Palm Beach restaurant problems include rodents and flies

BY DAVID J. NEAL
dneal@miamiherald.com

A Miami Gardens and Rivera Beach restaurant were part of this week's Sick and Shut Down List of Miami-Dade and Palm Beach restaurants that failed inspection.

Once again, we remind you, we don't do the inspecting, and we don't choose who gets inspected. Direct your complaints to the Florida Department of Business and Professional Regulation.

In alphabetical order:

Caribbean Kitchen 305, 760 NW 183rd St., Miami Gardens: Routine inspection, 20 total violations, six High Priority violations.

We told you about this place with its hot water deficiencies — which means washing and cleaning deficiencies —and rodent problems earlier this week.

The kitchen was open again after it corrected the issue for the next day's re-inspection.

Mulligan's Beach House Singer Island, 2551 N. Ocean Ave., Riviera Beach: Complaint inspection, six total violations, five High Priority violations.

Eight flies at the inside bar were "flying around, landing on liquor bottles and the wall behind" the bar. Rodents left 34 droppings on the kitchen floor.

Mulligan's passed a second re-inspection two days after the original inspection.

CITY OF OPA-LOCKA, FLORIDA
NOTICE TO THE PUBLIC

NOTICE IS HEREBY GIVEN that the City Commission of the City of Opa-locka, Florida will hold public hearings at the Regular Commission Meeting on **Wednesday, January 10, 2024 at 7:00 p.m.,** in the City Commission Chambers at the Opa-locka Municipal Complex, 780 Fisherman Street, 3rd Floor, Opa-locka, Florida, to consider the following items for final adoption:

FIRST READING / PUBLIC HEARINGS:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

SECOND READING / PUBLIC HEARING:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, ENTITLED "OFF-STREET PARKING AND LOADING REQUIREMENTS" TO SPECIFICALLY AMEND SECTION 2-152(F) ENTITLED "GENERAL PRINCIPLES" TO PROVIDE FOR OUTDOOR STORAGE OF VEHICLES ONLY IN A DESIGNATED PARKING SPACE, PROHIBITING DOUBLE PARKING AND REQUIRING THAT ALL AREAS ARE FREE FROM UNSIGHTLY CONDITIONS; AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, SPECIFICALLY SECTION 2-160 (C)(4) ENTITLED "PERMITTED OFF-STREET PARKING" TO REQUIRE A CURRENT VALID LICENSE PLATE FOR RESIDENTIAL PARKING AND FURTHER REQUIRING THAT VEHICLES PARKED AS COMMERCIAL AND INDUSTRIAL FACILITIES HAVE A VALID LICENSE PLATE AND OR BILL OF SALE AND WORK ORDER POSTED VISIBLY ON THE DRIVER'S SIDE WINDOW, INCLUDING VIN NUMBER FOR VEHICLE, BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION IN CODE; PROVIDING FOR AN EFFECTIVE DATE.-

RESOLUTIONS / PUBLIC HEARINGS:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SPECIAL EXCEPTION REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING IN THE SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT (R-1), ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200; PROVIDING FOR AN EFFECTIVE DATE.

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE FINAL SITE PLAN FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

All interested persons are encouraged to participate and will be heard with respect to the public hearings.

Additional information on the above item may be obtained by contacting the Office of the City Clerk by telephone 305-953-2800 or email jflores@opalockafl.gov. To participate or provide comments virtually, please register on the City of Opa-locka website at www.opalockafl.gov no later than 7:00 p.m. on Wednesday, January 10, 2024.

In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodations to participate in the proceeding should contact the Office of the City Clerk at (305) 953-2800 for assistance not later than five (5) days prior to the proceeding. If hearing impaired, you may telephone the Florida Relay Service at (800) 955-8771 (TTY), (800) 955-8770 (Voice), (877) 955-8773 (Spanish) or (877) 955-8707 (Creole).

PURSUANT TO FS 286.0105: *Anyone who desires to appeal any decision made by any board, agency, or commission with respect to any matter considered at such meeting or hearing will need a record of the proceedings, and for that reason, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal may be based.*

Joanna Flores, CMC
City Clerk
City of Opa-locka

Comprehensive Plan Update (2035/2045)

Planning Zoning and Appeals Board

November 14, 2023



CITY OF OPA-LOCKA FLORIDA

The city of bright opportunities

@opalockafl

EBENBACH CONSULTING LLC

85 YEARS

PROJECT UPDATE!

Where We're At Today and What We've Done!

Meetings

- Staff Kickoff – 12/07/22
- Kickoff – City Commission – 01/11/23
- PZAB Workshop – 03/07/23
- Interviews with City Commission, Boards and City Staff
- Property rights element was approved at 1st Reading by Commission
- Research and Analysis
- Draft Comprehensive Development Master Plan (Update)
- Commission Workshop – 10/25/23

Comprehensive Plan Review Process

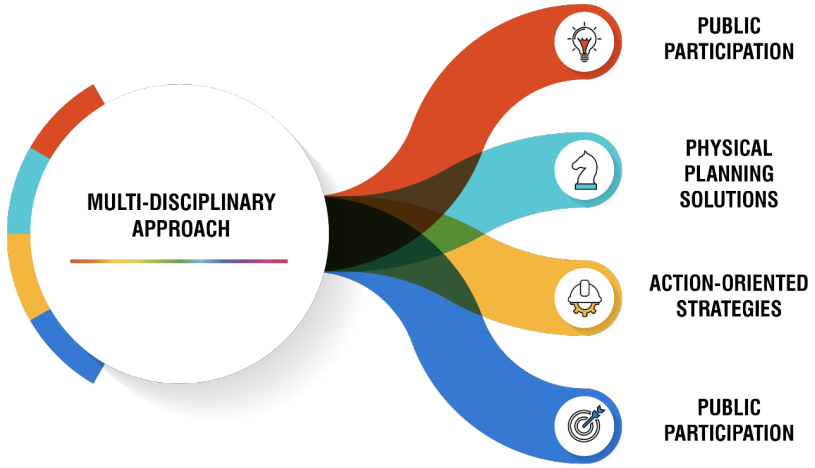
We identified some of the challenges and opportunities the City of Opa-Locka faces based on Commission, HEPB, PZAB, CRA, Ten North Group, Community and Staff Input.

The updated plan addresses changes such as:

- Sustainability and Resiliency
- Housing
- Water Supply Planning
- Infrastructure
- Economic Development and Redevelopment
- Property Rights
- Current and Future Growth
- Florida Statute Changes

Comprehensive Plan Review Process

TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8
Public Kick-Off and Review of Existing Plan	Data Collection and Assessment Report	Review of Existing Plans	Community Visioning Process	Assessment of Future Demands and Opportunities	Goals, Objectives and Policies Development	Comprehensive Plan Update (Draft)	Comprehensive Plan Update (Final Draft)



PROPOSED CHANGES TO THE OPA-LOCKA COMREHENSIVE DEVELOPMENT MASTER PLAN (UPDATE)

FUTURE LAND USE ELEMENT

- Created new land use designations to match Proposed Future Land Use Map: Low-Moderate and split up Civic into Civic, Airport, Parks, Utilities and Water
- Changed Planning Horizons to 2035/2045 to meet Florida Statute requirements
- More focus on retail, neighborhood uses and the public realm
- Enhancing, beautifying downtown
- Strengthen developer requirements and incentives for public benefits
- Enhanced code enforcement strategies
- Starting to touch on Housing, Historic Resources, Climate Resiliency
- Recreated maps

REDEVELOPMENT AND ECONOMIC DEVELOPMENT ELEMENT

- Reference the 2021 Downtown Master Plan and create policies
- Reference Opportunity Zones and other county, state and federal programs
- Reference Brownfield redevelopment
- Reference Moorish Design Guidelines for new development
- Add policies to:
  - Minimize commercial displacement due to gentrification or redevelopment
  - Assist in searching for alternative commercial sites with private sector, providing relocation assistance

TRANSPORTATION ELEMENT

- Add policies to:
  - Provide regular resurfacing and restriping of roads where needed, and coordinate the improvement of sidewalks, lighting, street furnishings
  - Ensure that all public streets are kept openly connected and free of barricades
  - Upgrade of bicycle and pedestrian facilities – Complete Streets
  - Increasingly safe and accessible circulation options – Micro-mobility
  - Promote innovative, flexible, and efficient parking solutions
  - Coordinate with Downtown Redevelopment, TODs
  - Transition to municipal electric vehicles
- Recreate Transportation Map Series

HOUSING ELEMENT

- Add policies to:
  - Minimize displacement due to gentrification and providing relocation assistance to displaced households/resident retention through first options
  - Provide for various housing types and group homes at appropriate locations
  - Positively address the social determinants of health in housing and neighborhood design;
  - Protect historically, culturally and architecturally significant housing, and;
  - Increase the energy efficiency of housing units and reduce carbon emissions in new development or redevelopment.
  - Examine and consider adopting an inclusionary zoning ordinance, mandating integration of affordable and/or workforce housing units in proposed development
  - Increase affordable housing opportunities for cost-burdened families
  - Prioritize investments in infrastructure that mitigate chronic flooding in residential neighborhoods
  - Ensure Ten North Group, public/private partnerships, joint ventures and City Departments have capacity to address housing needs

INFRASTRUCTURE AND AQUIFER RECHARGE ELEMENT

- Updated several of the Levels of Service (LOS) to be in line with service provider – Miami-Dade County (Sewer, Water, Fire Flow, Solid Waste) and amend Parks LOS

CONSERVATION ELEMENT

- Add policies to:
  - Add native tree canopy and landscaping in public areas and streets
  - Continue to upgrade all aged City water pipes as needed to minimize system water losses
  - Continue to implement stormwater drainage improvement projects and inspect existing systems
  - Facilitate the conversion of septic tanks to sanitary sewer
  - Promote the remediation and redevelopment of identified brownfields sites
  - Promote green building standards
  - Address energy conservation and continue to advance flooding mitigation efforts
  - Strengthen vegetative buffer specifications
  - Preserve Lake Ingram
  - Provide for electric vehicle charging infrastructure incentives

RECREATION AND OPEN SPACE ELEMENT

- Revisited the Level of Service Standard for Parks changed from ¼ to ½ mile of residential areas
- Added policies to:
  - Promote use of bonus development incentives for additional park space dedication
  - Increase the inventory and distribution of park grounds and facilities, including new pocket parks, throughout the City, prioritizing residential areas where park space is lacking
  - Protect green resources through maintenance
  - Add more programming that serves all age groups
- Added Glorieta, Butterfly Garden and Coachman Gardens Parks to the Parks Map

PUBLIC SCHOOLS AND EDUCATION ELEMENT

- Add policies to:
  - Partner with Universities
  - Promote environmental education and understanding of resilience principles in grades K-12.

- Update Schools Map Series

INTERGOVERNMENTAL COORDINATION ELEMENT

- Added agencies that the City coordinates with: Miami-Dade County, South Florida Water Management District

CAPITAL IMPROVEMENTS ELEMENT

- Add policy to:
  - Require that when constructing capital infrastructure improvements, the City shall include an Action Plan to provide clear project schedules, monitor progress, provide regular updates and provide a post completion report

- Cleaned up Level of Service table to match standards of service providers (Water, Sewer)

PROPERTY RIGHTS ELEMENT

- Create new element to comply with Florida Statutes
- Add Goal, Objective and Policies series to ensure that a property owner maintains the right to use, maintain, develop, and improve his or her property

Next Steps

- City Commission will review at First Reading – December 2023
- If approved the amended Comprehensive Plan will be submitted to State and other agencies for review (60 Day Review Period)
- City Commission will review the Plan again at Adoption Hearing – March/April 2024

THANK YOU!

Contact Information:

Gregory Gay, Director
Planning & Community Development Department
City of Opa-locka
GGay2@opalockafl.gov

Alex A. David, AICP, Project Manager, Calvin, Giordano & Assoc.
Adavid@CGASolutions.com

Karla Ebenbach, AICP, LEED, Ebenbach Consulting
Project Subconsultant
Karla@Ebenbach.com

Calvin, Giordano & Associates, Inc.
A SAFEbuilt COMPANY

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Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS™

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☒ **Miami-Dade Office** · 2103 Coral Way · Suite 810 · Miami, FL 33145 · 786.485.5200(p)

Memorandum

TO: Planning and Zoning Appeals Board
(Local Planning Agency)
City of Opa-Locka

VIA: Gregory D. Gay, AIA-NAM, Director
Planning & Community Development Department
City of Opa-Locka

FROM: Alex A. David, AICP
Calvin, Giordano & Associates
City Planning Consultant

CC: Karla Ebenbach
Ebenbach Consulting

Antonio Augello
Clavin, Giordano & Associates

SUBJECT: Evaluation and Appraisal Based Amendments to the City Comprehensive Development Master Plan (*2035/2045 Sustainable Opa-Locka*)

DATE: November 14, 2023

Florida Statute 163.3191(1) requires that at least once every 7 years ("Evaluation and Appraisal Cycle"), each municipality must evaluate its comprehensive plan to determine if plan amendments are necessary to reflect changes in state requirements, reflect changes in conditions, be consistent with the City's planning and regulatory needs and vision.

The last major update to the Comprehensive Plan occurred in 2015 (adoption date: July 22, 2015). The proposed Comprehensive Plan Update is attached with changes shown as new wording (<u>underlined</u>) and deletions (~~strikethrough~~).

The changes were based on some of the challenges and opportunities the City of Opa-Locka faces based on Commission, HEPB, PZAB, CRA, Ten North Group, Community and Staff Input and addresses: Florida Statute Changes, Sustainability and Resiliency, Housing, Water Supply Planning, Infrastructure, Economic Development and Redevelopment, Property Rights, Current and Future Growth.

To date a number of meetings and individual interviews have taken place and which include:

- Staff Project Kickoff – 12/07/22
- Project Kickoff/Introduction – City Commission – 01/11/23
- PZAB Workshop – 03/07/23
- Interviews with City Commission, Members of City Boards and City Staff
- Commission Workshop – 10/25/23

During this time the:

- Property rights element was approved at 1st Reading by Commission
- Research and Analysis was conducted/completed
- Draft Comprehensive Plan (Update) was completed

The changes, as proposed, will help strengthen the City's long-term ability to protect its residential neighborhoods and improve overall community character and quality of life.

After recommendation by the Planning and Zoning Appeals Board to the City Commission and first reading by the Commission the proposed amendments to the Comprehensive Plan will be transmitted to the FloridaCommerce Department and other review agencies. Once agency reviews are completed the item will be scheduled for second reading (adoption).

RECOMMENDATION

Recommendation of approval to the City Commission of "The 2035/2045 Sustainable Opa-locka Comprehensive Plan Update", including all text and map amendments.

Attachments

Draft "The 2035/2045 Sustainable Opa-locka Comprehensive Plan Update"
Draft Ordinance - adopting text and map amendments
PZAB Powerpoint Presentation

DRAFT CITY OF OPA-LOCKA EAR AMENDMENTS

ORDINANCE NO. 2023-XX

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1)), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions including those relating to Comprehensive Planning, and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, Section 2.5 of the City Charter of the City of Opa-Locka ("City") empowers the City Commission to adopt, amend, or repeal such ordinances as may be required for the proper governing of the City; and

WHEREAS, pursuant to F.S. 163.3191(1), at least once every 7 years ("Evaluation and Appraisal Cycle"), each local government shall evaluate its comprehensive plan to determine if plan amendments are necessary to reflect changes in state requirements in Part II of Chapter 163, Florida Statutes, since the last update of the local government's comprehensive plan, and notify the state land planning agency as to its determination; and

WHEREAS, City of Opa-locka City Commission recognizes that, periodically, it is necessary to amend the City Comprehensive Development Master Plan (the "Plan") in order to ensure that the Plan is current and consistent with the City's planning and regulatory needs; and

WHEREAS, the City Commission finds that the proposed evaluation and appraisal based text amendments, attached hereto as Exhibit "A", and incorporated herein by reference, will help strengthen the City's long-term ability to protect its residential neighborhoods and improve overall community character and quality of life; and

WHEREAS, the City Commission desires to comply with state law and adopt the text amendments to the City's Comprehensive Plan in the form prescribed by law; and

WHEREAS, notice was publicly advertised as required by City and State regulations regarding text amendments to the Comprehensive Plan; and,

WHEREAS, on XXXXX XX, 2023, the Planning and Zoning Appeals Board, as the local planning agency for the City held its hearing on this proposed Ordinance with due public notice and input, and recommended its adoption; and

WHEREAS, on XXXXX XX, 2023, the City Commission held a first reading and public hearing of this proposed Ordinance; and

WHEREAS, the City Commission voted to transmit the proposed evaluation and appraisal based text amendments to the Comprehensive Plan to state agencies, after first reading, for review pursuant to Section 163.3184(3)(b), Florida Statutes; and

WHEREAS, on XXXXX XX, 2024, the City Commission held a second reading and public reading of this proposed Ordinance with due public notice and input; and

NOW, THEREFORE, IT IS HEREBY ORDAINED BY THE CITY OF OPA-LOCKA, FLORIDA, AS FOLLOWS:

SECTION 1. RECITALS.

The above recitals are true and correct and incorporated into this Ordinance by reference.

SECTION 2. AMENDING THE CITY OF OPA-LOCKA COMPREHENSIVE PLAN.

The City of Opa-Locka, Florida, Comprehensive Plan is hereby amended to incorporate the proposed text amendment, pursuant to Section 163.3184, Florida Statutes, as found in Exhibit "A".

SECTION 3. SCRIVENER'S ERRORS.

Sections of this Ordinance may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Ordinance may be authorized by the City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. CONFLICT AND REPEALER.

Any provision of any City of Opa-Locka ordinance or regulation which is in conflict with the provisions of this Ordinance is repealed prospectively to the extent of such conflict.

SECTION 5. LIBERAL CONSTRUCTION.

The terms and provisions of this Ordinance shall be liberally construed to affect the purpose for which it is adopted.

SECTION 6. SEVERABILITY.

If any portion of this Ordinance is for any reason held or declared to be unconstitutional, invalid or void, such holding shall not affect the remaining portions of this Ordinance. If this Ordinance shall be held to be inapplicable to any person, property or circumstances, such holding shall not affect the applicability of this Ordinance to any other person, property or circumstances.

SECTION 7. EFFECTIVE DATE.

That pursuant to Florida Law, the Comprehensive Plan amendment(s) adopted by this Ordinance shall not become effective until 31 days after the state land planning agency notifies the local government that the plan amendment package is complete. If timely challenged, an amendment does not become effective until the state land planning agency or the Administration Commission enters a final order determining the adopted amendment to comply.

PASSED FIRST READING this _____ day of _____, 2023.

PASSED SECOND READING this_____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by:

Seconded by:

VOTE:

Commissioner Williams
Commissioner Kelley
Commissioner Bass
Vice Mayor Ervin
Mayor Taylor

Sponsored by: Interim City Manager

ORDINANCE NO. 2024-XX

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6)), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Florida Statutes provide that municipalities shall address water supply planning by strengthening the statutory links between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by local governments; and

WHEREAS, Florida Statutes also require improving coordination between the local land use planning and water supply planning; and

WHEREAS, Section 163.3177(6), Florida Statutes, requires local governments to assess their current as well as projected water needs and sources for at least a ten-year planning period, considering the approved regional and county water supply plan for the respective local government; and

WHEREAS, Section 163.3177(4)(a), Florida Statutes, requires coordination of the local comprehensive plan with the water management district's regional water supply plan; and

WHEREAS, City residents receive potable water from the Miami-Dade County Water and Sewer Department (M-D WASD) which is the water supplier; and

WHEREAS, Miami-Dade County adopted its 10-Year Water Supply Facilities Work Plan Update on January 19, 2023; and

WHEREAS, Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions including those relating to Water Supply Planning and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, Section 2.5 of the City Charter of the City of Opa-Locka ("City") empowers the City Commission to adopt, amend, or repeal such ordinances as may be required for the proper governing of the Commission; and

WHEREAS, the City of Opa-Locka City Commission recognizes that, every 5 years, it is necessary to amend the City's Water Supply Facilities Work Plan (the "Plan") and water supply plan related text amendments, attached hereto as Exhibit "A", and incorporated herein by reference in order to ensure that the Plan is current and consistent with the City's planning and regulatory needs; and

WHEREAS, the City Commission desires to comply with state law and adopt the City's Water Supply Facilities Work Plan (the "Plan") and water supply plan related text amendments in the form prescribed by law; and

WHEREAS, notice was publicly advertised as required by City and State regulations regarding text amendments to the Comprehensive Plan; and,

WHEREAS, on December 12, 2023, the Planning and Zoning Appeals Board, as the local planning agency for the City held its hearing on this proposed Ordinance with due public notice and input, and recommended its adoption; and

WHEREAS, on January 10, 2024, the City Commission held a first reading and public hearing of this proposed Ordinance; and

WHEREAS, the City Commission voted to transmit the proposed water supply plan related text amendments to the Comprehensive Plan to state agencies, after first reading, for review pursuant to Section 163.3177(6), Florida Statutes; and

WHEREAS, on XXXXX XX, 2024, the City Commission held a second reading and public reading of this proposed Ordinance with due public notice and input; and

NOW, THEREFORE, IT IS HEREBY ORDAINED BY THE CITY OF OPA-LOCKA, FLORIDA, AS FOLLOWS:

SECTION 1. RECITALS.

The above recitals are true and correct and incorporated into this Ordinance by reference.

SECTION 2. AMENDING THE CITY OF OPA-LOCKA COMPREHENSIVE PLAN.

The City of Opa-Locka, Florida, Comprehensive Plan is hereby amended to incorporate by reference the 2022 10-Year Water Supply Facilities Work Plan Update (Exhibit "A") and proposed water supply plan related text amendments, pursuant to Section 163.3177(6), Florida Statutes, as follows:

Infrastructure Element

Policy I-1.1: To assure adequate level of service, the following LOS standards are hereby adopted, and shall be used as the basis for determining the facility capacity and the demand generated by a development.

FACILITY	LEVEL OF SERVICE STANDARDS
Sanitary Sewer Facilities	The ~~system shall maintain the~~ wastewater treatment plants shall operate with a physical capacity of no less than ~~to collect and dispose of 102 percent of~~ the average daily influent sewage flow for the ~~system demand for the~~ preceding ~~five years~~ 12 months. Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards. The system shall collectively maintain the capacity to collect and dispose of no less than 102 percent of the average daily influent sewage system flow for the preceding five years accounting for reserved capacity. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months. The annual average daily influent sewage flow shall be calculated as the average of the daily volume received at the facility over a 12-month period. ~~All treatment plants shall maintain the capacity to treat no less than the average daily sewage flow.~~

<table>
<tr><td></td><td>~~Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards.~~

The per capita Level of Service standard for sanitary sewer shall be 122 gallons per capita per day.</td></tr>
<tr><td>Fire Flow</td><td>Water shall be delivered to users at a pressure no less than 20 pounds per square inch (psi) and no greater than 100 psi. Unless otherwise approved by the Miami-Dade Fire Rescue Department, minimum fire flows based on the land use served shall be maintained as follows:

<table>
<tr><td>Land Use:</td><td>Min. Fire Flow (gpm)
~~Gallons Per Minute~~</td></tr>
<tr><td>Single Family Residential Estate</td><td>~~750~~
500</td></tr>
<tr><td>Single Family and Duplex; Residential on minimum lots of 7,500 sf</td><td>750</td></tr>
<tr><td>Multi-Family Residential (Low Medium Density), Semiprofessional Offices</td><td>1,500</td></tr>
<tr><td>Multi-Family Residential (Medium and High Density)</td><td>2,000</td></tr>
<tr><td>Hospitals, Schools, Business and Industry</td><td>~~2~~3,000</td></tr>
<tr><td>~~Commercial/Industrial~~</td><td>~~3,000~~</td></tr>
</table></td></tr>
<tr><td colspan="2">* * *</td></tr>
</table>

Potable Water	Regional treatment. System shall operate with a maximum daily rated capacity that is no less than 2% above maximum daily flow for the preceding year, and an average daily capacity 2% above the average daily system demand for the preceding 5 years. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months. User LOS. Maintain capacity to produce and deliver ~~126.82~~ 120.26 gallons per capita per day systemwide. Water Quality. Shall meet all county, state and federal primary potable water standards. Countywide Storage. Storage capacity for finished water shall equal no less than 15% of countywide average daily demand.

Objective I-5 Monitoring Measures:

1. Achievement of regional water conservation goals.
2. The City's Work Plan Update shall remain consistent with the County's ~~2~~1 0-Year Supply Facilities Work Plan Update, which is compatible with the Miami Dade County Water Use Permit renewals and with projects as listed in the South Florida Water Management District's 201~~3~~8 Lower East Coast Regional Water Supply Plan Update. The Work Plan will be updated, at a minimum, every 5 years and within 18 months after the South Florida Water Management District's approval of an updated Lower East Coast Regional Water Supply Plan.

Policy I-5.4: The City of Opa-Locka must adopt by reference into its Comprehensive Plan the City of Opa-Locka 20~~15~~22 ~~2~~10-year Water Supply Facilities Work Plan Update (Work Plan Update) adopted ~~May 25, 2016~~ XXXX, as required by section 163.3177(6)(c), F.S. within 18 months after the governing board of the South Florida Water Management District approves its 201~~3~~8 Lower East Coast Water Supply Plan Update. The Work Plan will be updated, at a minimum, every 5 years. The City of Opa-Locka 20~~15~~22 ~~2~~10-year Water Supply Facilities Work Plan Update is designed to: assess current and projected potable water demands; evaluate the sources and capacities of available water supplies; and, identify those water supply projects, using all available technologies, necessary to meet the City's water demands for a 20-year period.

Policy I-5.5: Comply with the 20~~15~~22 ~~2~~10-year Water Supply Facilities Work Plan Update adopted on ~~May 25, 2016~~ XXXX and incorporate such Work Plan Update into the City of Opa-Locka Comprehensive Plan.

Conservation Element

Policy C-3.5: The implementation of the 20~~15~~22 ~~2~~10-year Water Supply Facilities Work Plan Update will ensure that adequate water supplies and public facilities are available to serve the water supply demands of the City's growing population.

Policy C-3.7: By July 1, 2024, the City shall adopt conservation measures by ordinance in conformance with the SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures (as detailed in 40E-24, Florida Administrative code). Specifically, the City ordinance shall prohibit landscape irrigation during those periods of the day when irrigation efficiency significantly decreases, and limit landscape irrigation water use to two days per week. The City ordinance shall further encourage users to apply no more than 3/4 -inch to 1-inch of water per week on their lawns and landscape areas and only as needed to supplement rainfall.

Implementation:

- Who? The City
- How? Through the enforcement of SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures
- When? Upon Ordinance adoption

Intergovernmental Coordination

Objective IC-1 Monitoring Measures:

1. Demonstrated compliance with policies IC-1.1 – IC1.8 (ongoing participation in intergovernmental coordination efforts).

Policy IC-1.6: The City shall coordinate the planning of potable water and sanitary sewer facilities and services and level-of-service standards within the Miami-Dade County Water and Sewer Department, Department of Regulatory and Economic Resources, the South Florida Water Management District, and the 201~~3~~8 Lower East Coast Water Supply Plan Update.

Policy IC-1.7: The City will coordinate with the South Florida Water Management District concerning its jurisdictional authority as necessary and support its efforts concerning the *201~~3~~8 Lower East Coast Water Supply Plan Update*, ACCELER8 Everglades and CERP and the Biscayne Bay Coastal Wetlands

Project to protect an Outstanding Florida Water – Biscayne Bay. The City hereby adopts by reference the Miami-Dade County Comprehensive Development Master Plan Amendments adopted ~~February 4, 2015~~ January 19, 2023, the Miami-Dade Water and Sewer Department ~~2~~10-year Water Supply Facilities Work Plan ~~(2014-2033) Support Data (November 2014)~~, the *201~~3~~8 Lower East Coast Water Supply Plan Update* (LEC) approved by the South Florida Water Management District (SFWMD) on ~~October 10, 2013~~ November 8, 2018 and additional information found within Water Use Permit 13-00017-W are herein incorporated by reference. The Water Use Permit which was modified and approved by the SFWMD on ~~February 9, 2015~~ March 8, 2022, will now expire on ~~February 9, 2035~~ December 27, 2065.

Capital Improvements

Policy CI-3.1: The City shall utilize the following level of service standards as the basis for determining facility capacity and the demand generated by development.

FACILITY	LEVEL OF SERVICE STANDARDS
Sanitary Sewer Facilities	The ~~system shall maintain the~~ wastewater treatment plants shall operate with a physical capacity of no less than ~~to collect and dispose of 102 percent of~~ the average daily influent sewage flow for the ~~system demand for the~~ preceding ~~five years~~ 12 months. Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards. The system shall collectively maintain the capacity to collect and dispose of no less than 102 percent of the average daily influent sewage system flow for the preceding five years accounting for reserved capacity. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months. The annual average daily influent sewage flow shall be calculated as the average of the daily volume received at the

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<tr><td></td><td>facility over a 12-month period.

~~All treatment plants shall maintain the capacity to treat no less than the average daily sewage flow.~~

~~Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards.~~

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* * *	
Potable Water	Regional treatment. System shall operate with a maximum daily rated capacity that is no less than 2% above maximum daily flow for the preceding year, and an average daily capacity 2% above the average daily system demand for the preceding 5 years. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months. User LOS. Maintain capacity to produce and deliver ~~126.82~~ 120.26 gallons per capita per day systemwide. Water Quality. Shall meet all county, state and federal primary potable water standards. Countywide Storage. Storage capacity for finished water shall equal no less than 15% of countywide average daily demand.

SECTION 3. SCRIVENER'S ERRORS.

Sections of this Ordinance may be renumbered or re-lettered and corrections of typographical errors, which do not affect the intent of this Ordinance may be authorized by the City Manager, following review by the City Attorney, without need of public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. CONFLICT AND REPEALER.

Any provision of any City of Opa-Locka ordinance or regulation which is in conflict with the provisions of this Ordinance is repealed prospectively to the extent of such conflict.

SECTION 5. LIBERAL CONSTRUCTION.

The terms and provisions of this Ordinance shall be liberally construed to affect the purpose for which it is adopted.

SECTION 6. SEVERABILITY.

If any portion of this Ordinance is for any reason held or declared to be unconstitutional, invalid or void, such holding shall not affect the remaining portions of this Ordinance. If this Ordinance shall be held to be inapplicable to any person, property or circumstances, such holding shall not affect the applicability of this Ordinance to any other person, property or circumstances.

SECTION 7. EFFECTIVE DATE.

That pursuant to Florida Law, the Comprehensive Plan amendment(s) adopted by this Ordinance shall not become effective until 31 days after the state land planning agency notifies the local government that the plan amendment package is complete. If timely challenged, an amendment does not become effective until the state land planning agency or the Administration Commission enters a final order determining the adopted amendment to comply.

PASSED FIRST READING this _____ day of _____, 2024.

PASSED SECOND READING this_____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-locka
Agenda Cover Memo

Department Director:	Gregory D. Gay			**Department Director Signature:**			
City Manager:	Darvin Williams			**CM Signature**			
Commission Meeting Date:	January 10, 2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**
					X		
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**
					X		X
		X	**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
					X		X	
Funding Source: *Account#* : **N/A**	*(Enter Fund & Dept)* Ex: See Financial Impact section below		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
					X			
ILA Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:** N/A					
		X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ■ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ■ **Communication** ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
	X							
Sponsor Name	Darvin Williams		**Department: Planning & Community Development**		City Manager			

Short Title:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6)), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

Staff Summary:

Florida Statutes provide that municipalities shall address water supply planning by strengthening the statutory links between the regional water supply plans prepared by the

water management districts and the comprehensive plans prepared by local governments. Florida Statutes also require improving coordination between the local land use planning and water supply planning. Florida Statutes, Section 163.3177(6), requires local governments to assess their current as well as projected water needs and sources for at least a ten-year planning period, considering the approved regional and county water supply plan for the respective local government. Section 163.3177(4)(a), Florida Statutes, requires coordination of the local comprehensive plan with the water management district's regional water supply plan. City of Opa-locka residents receive potable water from the Miami-Dade County Water and Sewer Department (M-D WASD) which is the City's water supplier and Miami-Dade County adopted its 10-Year Water Supply Facilities Work Plan Update on January 19, 2023.

Florida Statutes provides that municipalities shall have the governmental, corporate, and proprietary power to enable them to conduct municipal government, perform municipal functions including those relating to Water Supply Planning and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law. Section 2.5 of the City Charter of the City of Opa-Locka ("City") empowers the City Commission to adopt, amend, or repeal such ordinances as may be required for the proper governing of the City by the Commission. The City of Opa-locka City Commission recognizes that, every 5 years, it is necessary to amend the City's Water Supply Facilities Work Plan (the "Plan") and water supply plan related text amendments, attached hereto as Exhibit "A", and incorporated herein by reference in order to ensure that the Plan is current and consistent with the City's planning and regulatory needs.

The City Commission desires to comply with state law and adopt the City's Water Supply Facilities Work Plan (the "Plan") and water supply plan related text amendments in the form prescribed by law and notice was publicly advertised as required by City and State regulations regarding text amendments to the Comprehensive Plan.

On December 12, 2023, the Planning and Zoning Appeals Board, as the local planning agency for the City held its hearing on this proposed Ordinance with due public notice and input, and recommended its adoption by a 5 – 0 vote, and the City Commission will hold a first reading and public hearing of this proposed Ordinance on January 10, 2024 at which time the City Commission may agree to approve this legislation and vote to transmit the proposed water supply plan related text amendments to the Comprehensive Plan to State Agencies after first reading for review pursuant to Section 163.3177(6), Florida Statutes. The City Commission will hold a second reading and public reading of this proposed Ordinance with due public notice and input from state agencies for final adoption.

Financial Impact

Approval of the Opa-Locka Comprehensive Development Master Plan to incorporate the adopted 2022 10-year water supply facilities work plan will not provide any negative financial impact.

Proposed Action:

Staff recommended approval of this Ordinance.

Attachment:

Draft Ordinance
CGA Memo -Water Supply Plan Update and Comprehensive Plan Amendments
Draft Work Plan Update & Related Comprehensive Plan Amendments

These blenders might cut you or burn your things. About 4.8 million have been recalled

BY DAVID J. NEAL
dneal@miamiherald.com

A blender should cut fruit, not your skin. Nor should it burn your possessions. So, BlendJet recalled about 4.9 million BlendJet 2 Portable Blenders sold in the United States and Canada.

"The recalled blenders can overheat or catch fire and the blender blades can break off, posing fire and laceration hazards to consumers," the U.S. Consumer Product Commission recall notice states.

That's not an idle concern. The recall notice says BlendJet knows about 329 times the blades broke; 49 times people got burned; one person who got sliced; 17 times the blenders overheated or started fires, causing $150,000 of property damage.



U.S. Consumer Product Safety Commission

BlendJet 2 Portable Blenders have been recalled.

BlendJet wants customers with the blenders, which were sold from October 2020 through this November, to reach out to the company for a free replacement of the base. Do this by cutting the rubber seal on the base into three or more pieces, shoot a photo with the pieces and the serial number on the base and email it to safety@blendjet.com or upload it to the recall website.

To see if this recall concerns your blender, you can go to BlendJet's site and enter your blender's serial number.

For other questions, either go to the recall website hyperlinked above or call BlendJet Monday through Friday, 8 a.m. to 10 p.m., Eastern time at 844-334-0562.

David J. Neal: 305-376-3559, @DavidJNeal

Miami Gardens, Palm Beach restaurant problems include rodents and flies

BY DAVID J. NEAL
dneal@miamiherald.com

A Miami Gardens and Rivera Beach restaurant were part of this week's Sick and Shut Down List of Miami-Dade and Palm Beach restaurants that failed inspection.

Once again, we remind you, we don't do the inspecting, and we don't choose who gets inspected. Direct your complaints to the Florida Department of Business and Professional Regulation.

In alphabetical order:

Caribbean Kitchen 305, 760 NW 183rd St., Miami Gardens: Routine inspection, 20 total violations, six High Priority violations.

We told you about this place with its hot water deficiencies — which means washing and cleaning deficiencies —and rodent problems earlier this week.

The kitchen was open again after it corrected the issue for the next day's re-inspection.

Mulligan's Beach House Singer Island, 2551 N. Ocean Ave., Riviera Beach: Complaint inspection, six total violations, five High Priority violations.

Eight flies at the inside bar were "flying around, landing on liquor bottles and the wall behind" the bar. Rodents left 34 droppings on the kitchen floor.

Mulligan's passed a second re-inspection two days after the original inspection.

CITY OF OPA-LOCKA, FLORIDA
NOTICE TO THE PUBLIC

NOTICE IS HEREBY GIVEN that the City Commission of the City of Opa-locka, Florida will hold public hearings at the Regular Commission Meeting on **Wednesday, January 10, 2024 at 7:00 p.m.,** in the City Commission Chambers at the Opa-locka Municipal Complex, 780 Fisherman Street, 3rd Floor, Opa-locka, Florida, to consider the following items for final adoption:

FIRST READING / PUBLIC HEARINGS:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

SECOND READING / PUBLIC HEARING:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, ENTITLED "OFF-STREET PARKING AND LOADING REQUIREMENTS" TO SPECIFICALLY AMEND SECTION 2-152(F) ENTITLED "GENERAL PRINCIPLES" TO PROVIDE FOR OUTDOOR STORAGE OF VEHICLES ONLY IN A DESIGNATED PARKING SPACE, PROHIBITING DOUBLE PARKING AND REQUIRING THAT ALL AREAS ARE FREE FROM UNSIGHTLY CONDITIONS; AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, SPECIFICALLY SECTION 2-160 (C)(4) ENTITLED "PERMITTED OFF-STREET PARKING" TO REQUIRE A CURRENT VALID LICENSE PLATE FOR RESIDENTIAL PARKING AND FURTHER REQUIRING THAT VEHICLES PARKED AS COMMERCIAL AND INDUSTRIAL FACILITIES HAVE A VALID LICENSE PLATE AND OR BILL OF SALE AND WORK ORDER POSTED VISIBLY ON THE DRIVER'S SIDE WINDOW, INCLUDING VIN NUMBER FOR VEHICLE, BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION IN CODE; PROVIDING FOR AN EFFECTIVE DATE.-

RESOLUTIONS / PUBLIC HEARINGS:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SPECIAL EXCEPTION REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING IN THE SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT (R-1), ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200; PROVIDING FOR AN EFFECTIVE DATE.

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE FINAL SITE PLAN FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

All interested persons are encouraged to participate and will be heard with respect to the public hearings.

Additional information on the above item may be obtained by contacting the Office of the City Clerk by telephone 305-953-2800 or email jflores@opalockafl.gov. To participate or provide comments virtually, please register on the City of Opa-locka website at www.opalockafl.gov no later than 7:00 p.m. on Wednesday, January 10, 2024.

In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodations to participate in the proceeding should contact the Office of the City Clerk at (305) 953-2800 for assistance not later than five (5) days prior to the proceeding. If hearing impaired, you may telephone the Florida Relay Service at (800) 955-8771 (TTY), (800) 955-8770 (Voice), (877) 955-8773 (Spanish) or (877) 955-8707 (Creole).

PURSUANT TO FS 286.0105: *Anyone who desires to appeal any decision made by any board, agency, or commission with respect to any matter considered at such meeting or hearing will need a record of the proceedings, and for that reason, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal may be based.*

Joanna Flores, CMC
City Clerk
City of Opa-locka

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS™

Memorandum

☐ **Fort Lauderdale Office** · 1800 Eller Drive · Suite 600 · Fort Lauderdale, FL 33316 · 954.921.7781(p) · 954.921.8807(f)
☒ **Miami-Dade Office** · 2103 Coral Way · Suite 810 · Miami, FL 33145 · 786.485.5200(p)

TO: Planning and Zoning Appeals Board
(Local Planning Agency)
City of Opa-Locka

VIA: Gregory D. Gay, AIA-NAM, Director
Planning & Community Development Department
City of Opa-Locka

FROM: Alex A. David, AICP
Calvin, Giordano & Associates
City Planning Consultant

CC: Karla Ebenbach
Ebenbach Consulting

Antonio Augello
Clavin, Giordano & Associates

SUBJECT: 2022 10-Year Water Supply Facilities Work Plan Update, including all text and map amendments

DATE: November 14, 2023

Changes to the City's 10-Year Water Supply Facilities Work Plan Update and associated amendments to the Comprehensive Plan were last adopted May 25, 2016. Florida Statutes require a review every five years.

BACKGROUND AND ANALYSIS

The City is subject to the jurisdiction of the South Florida Water Management District (SFWMD) in regard to State requirements for local water supply planning. The SFWMD has concluded that traditional water supply sources will not be sufficient to meet the water needs of the growing South Florida population. As a result, the Florida Legislature enacted seven (7) bills in Sessions between 2002 and 2016 in order to address the State's water supply needs, as potential limitations on the continued use of traditional water supplies became increasingly apparent.

Chapter 163, F.S. requires all local municipalities to update their Water Supply Facilities Work Plan and adopt that plan into the comprehensive plan within 18 months of the SFWMD's approval of the Lower East Coast Water Supply Plan. The work plan and the comprehensive plan amendments must address the development of traditional and alternative water supplies and conservation and reuse programs that are necessary to serve existing and new development for at least a 10-year planning period. The Lower East Coast Water Supply Plan was approved on November 8, 2018. Therefore, the deadline for local governments within the Lower East Coast jurisdiction to amend their comprehensive plans to adopt a Work Plan Update was May 2020. This deadline could not be achieved because Miami-Dade County did not adopt their water supply plan until January 19, 2023.

The previous LOS as established by the City and based on Miami-Dade County data was 126.82 gallons per capita per day. With conservation and leak detection efforts the per capita per day demand has now been lowered to 120.26 gallons. Therefore, the recommended LOS is 120.26 gallons per capita per day.

A copy of the draft Work Plan Update and the related Comprehensive Plan amendments are attached.

After recommendation by the Planning and Zoning Appeals Board to the City Commission and first reading by the Commission the proposed water supply plan related amendments to the Comprehensive Development Master Plan will be transmitted to the FloridaCommerce Department and other review agencies. Once agency reviews are completed the item will be scheduled for second reading (adoption).

RECOMMENDATION

Recommendation of approval to the City Commission of "2022 10-Year Water Supply Facilities Work Plan Update", including all text and map amendments.

Attachments

Draft 2022 10-Year Water Supply Facilities Work Plan Update
Draft Ordinance - adopting 2022 Water Supply Facilities Work Plan Update
PZAB Powerpoint Presentation

CITY OF OPA-LOCKA

2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE



Calvin, Giordano & Associates, Inc.
A SAFEbuilt COMPANY

Acknowledgements

City Commission

Mayor John H. Taylor, Jr.
Vice-Mayor Natasha L. Ervin
Commissioner Sherelean Bass
Commissioner Joseph L. Kelley
Commissioner Veronica J. Williams

Planning & Zoning Board

Elio Guerrero, Chairman
Germane Barnes, Board Member
Audrey Dominguez, Board Member
Dorothy Johnson, Board Member
Dawn Mangham, Board Member
Aldo Mata, Board Member
Claudienne Hibbert Smith, Board Member

Opa-locka Staff

Darvin Williams, Interim City Manager
Burnadette Norris-Weeks, City Attorney
Joanna Flores, City Clerk
Gregory Gay, Planning and Community Development Director

Calvin, Giordano & Associates, Inc.
A SAFEbuilt COMPANY

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ATTACHMENTS

Miami-Dade County Final Recommendations Report to Amend the CDMP (Adopted January 19, 2023)

Miami-Dade County 10-Year Water Supply Facilities Work Plan (April 2022)

MDWASD Water Conservation Plan (November 2020)

1.0 INTRODUCTION

The City of Opa-Locka (City) acknowledges the importance of water conservation and reuse and has included policies in its Comprehensive Plan ~~in order~~ to assist in implementing related strategies. The City also recognizes that ~~in order~~ to maintain a proactive water conservation program there must be an effective coordination program with Miami-Dade County Water and Sewer Department (MDWASD) to ensure the success of the program. In addition, the City maintains an excellent working relationship with MDWASD as a wholesale customer to ensure compliance with all applicable regulations and guidelines. Since the City is a wholesale customer, City residents and businesses buy their water from the City at a determined rate. Under this arrangement, the City's Public Works Department coordinates with WASD to ensure that enough capacity is available for existing and future customers and supporting infrastructure such as the water lines are adequately maintained.

The City of Opa-Locka ~~2015~~ 2022 ~~2~~10-Year Water Supply Facilities Work Plan Update (hereinafter the Work Plan Update) adopted on ~~May 25, 2016~~ XXXX will reference the initiatives already identified in the Miami-Dade County's ~~2~~10-year Water Supply Facilities Work Plan Update, which was adopted on ~~February 4, 2015~~ January 19, 2023, since the City is a wholesale customer obtaining 100% of its water needs from MDWASD. According to state guidelines, the Work Plan Update and the Comprehensive Plan elements must address the development of traditional and alternative water supplies, bulk sales agreements and conservation and reuse programs that are necessary to serve existing and new development for at least a 10-year planning period.

The purpose of the City's ~~new 2015~~ 2022 ~~2~~10-Year Water Supply Facilities Work Plan Update is to identify and plan for the water supply sources and facilities needed to serve existing and new development within the local government's jurisdiction. The City's first Work Plan was adopted on September 14, 2011 with a 10-year planning horizon while the second Work Plan was adopted on May 25, 2016 with a 20-year planning horizon. This Work Plan Update will be adopted with a ~~2~~10-year planning horizon to be consistent with both the Miami-Dade County and South Florida Water Management District Water Facilities Work Plans. Chapter 163, Part II, F.S., requires local governments to prepare and adopt Water Supply Work Plans into their comprehensive plans within 18 months after the water management district approves a regional water supply plan or its update. Updates to the original Work Plan are required every five years. The City is located in the South Florida Water Management District region in southeast Florida (Figure 1). The 201~~3~~8 *Lower East Coast Water Supply Plan Update* (LEC) was approved by the South Florida Water Management District (SFWMD) on ~~October 10, 2013~~ November 8, 2018. Therefore, local governments within the South Florida Water Management District Lower East Coast jurisdiction should amend their comprehensive plans to adopt a Work Plan Update ~~by March 12, 2015~~ within the referenced timeframe. As stated previously,

MDWASD provides wholesale potable water service to its customers in the City (Figure 2).

The City's Work Plan is divided into six sections:
Section 1 – Introduction
Section 2 – Background Information
Section 3 – Data and Analysis
Section 4 – Intergovernmental Coordination
Section 5 -- Capital Improvement Elements
Section 6 – Goals, Objectives, Policies

1.1 Statutory History

The Florida Legislature has enacted bills in the 2002, 2004, 2005, ~~and~~ 2011, 2012, 2015 and 2016 sessions to address the state's water supply needs. These bills, especially Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapter 163 and 373 Florida Statutes (F.S.) by strengthening the statutory links between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by local governments. In addition, these bills established the basis for improving coordination between the local land use planning and water supply planning.

1.2 Statutory Requirements

The City of Opa-Locka has considered the following statutory provisions when updating the Water Supply Facilities Work Plan (Work Plan):

1. Coordinate appropriate aspects of its comprehensive plan with the South Florida Water Management District's Regional Water Supply Plan, [163.3177(6)(a), F.S.].

2. Ensure that its future land use plan is based upon availability of adequate water supplies and public facilities and services [s.163.3177(6)(a), F.S. Data and analysis demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Map amendments submitted for review.

3. Ensure that adequate water supplies and facilities are available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent and consult with the applicable water supplier to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy [s.163.3180 (2)(a), F.S.].

4. For local governments subject to a regional water supply plan, revise the General Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (the "Infrastructure Element"), within 18 months after the water management district approves an updated regional water supply plan, to:

a. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the updated SFWMD Regional Water Supply Plan or the alternative project(s) proposed by the local government under s. 373.709(8)(b), F.S. [s. 163.3177(6)(c), F.S.];

b. Identify the traditional and alternative water supply projects, and the conservation and reuse programs necessary to meet water needs identified in the SFWMD Regional Water Supply Plan [s. 163.3177(6)(c), F.S.]; and,

c. Update the Work Plan for at least a 10-year planning period for constructing the public, private, and regional water supply facilities identified in the element as necessary to serve existing and new development. [s. 163.3177(6)(c), F.S.].

5. Revise the Five-Year Schedule of Capital Improvements to include water supply, reuse, and conservation projects and programs to be implemented during the five-year period [s. 163.3177(3)(a)4, F.S.].

6. To the extent necessary to maintain internal consistency after making changes described in Paragraph 1 through 5 above, revise the Conservation Element to assess projected water needs and sources for at least a 10-year planning period, considering the SFWMD Regional Water Supply Plan, the applicable District Water Management Plan, as well as applicable consumptive use permit(s). [s.163.3177 (6)(d), F.S.]. The plan must address the water supply sources necessary to meet and achieve the existing and projected water use and demand for the established planning period, considering the SFWMD Regional Water Supply Plan [s.163.3167(9), F.S.].

7. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with the SFWMD Regional Water Supply Plan [s.163.3177(6)(h)1., F.S.].

8. While an Evaluation and Appraisal Report is not required, local governments are encouraged to comprehensively evaluate, and as necessary, update comprehensive plans to reflect changes in local conditions. The evaluation could address the extent to which the local government has implemented the need to update their Work Plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, and conservation and reuse programs are meeting local water use demands [s.163.3181(3), F.S.].

9. A local government that does not own, operate, or maintain its own water supply facilities, including, but not limited to, wells, treatment facilities, and distribution infrastructure, and is served by a public water utility with a permitted allocation of greater than 300 million gallons per day is not required to amend its comprehensive plan in response to an updated regional water supply plan or to maintain a work plan if any such local government's usage of water constitutes less than 1 percent of the public water utility's total permitted allocation. However, any such local government is required to cooperate with, and provide relevant data to, any local government or utility provider that provides and natural groundwater aquifer recharge element updated in accordance with

s. 163.3191. Any local government may verify its qualifications for the exemption with the Florida Department of Economic Opportunity (DEO) [s. 163.3177(6)(c)4., F.S.].

2.0 BACKGROUND INFORMATION

2.1 Overview

The City of Opa-locka, incorporated in 1926, ~~and~~ is located in northwestern Miami-Dade County. The City has an ~~combined~~ area of approximately 4.4 square miles. The City is bounded by NW 151 Street to the north, NW 119 Street to the south, NW 17 Avenue to the east and NW 47 Avenue to the west. The City is located near major transportation roadways including State Road 9, NW 37 Avenue, Gratigny Parkway, NW 27 Avenue, NW 22 Avenue, and NW 135 Street.

The City had a 2010 Census population of ~~14,886~~ 16,463. The Miami-Dade Water and Sewer Department Wholesale Customers Report reflects a 20~~16~~20 population of ~~15,507~~ 16,631 persons living in Opa-Locka. For the purposes of this Update, the data found in the Miami-Dade County 10-Year Water Supply Facilities Work Plan (April 2022) will be utilized.

~~Nearly 14% of Opa-Locka's gross acreage is vacant and, as indicated by the current economy, it is unlikely that t~~The City will experience a population ~~boom in the next several years unless development of mixed-use projects within the downtown is realized~~ increase during this planning period. ~~The~~ A potential expansion of the City's current boundaries through annexations is another factor which might result in a ~~significant~~ population increase during the planning period. ~~The Commission has actively sought to annex several mostly commercial/industrial areas.~~

~~The City of Opa-Locka Sustainable Communities Challenge Initiative: Current Conditions Report dated September 2012 provided~~ aAn evaluation of land uses by gross acreage~~.~~ ~~This report~~ has revealed the following approximate breakdown: Industrial (34~~8~~ %); Vacant (~~21~~6%); Residential (1~~5~~7 %); Government (~~1~~5%); Commercial (~~11~~3%); Institutional (~~2~~6%); Roads/ROW (20%) and, ~~Other~~ Water (~~3~~4%).

2.2 Relevant Regional Issues

Regional issues that affect the City of Opa-Locka include minimizing pressure on the Everglades and Biscayne Bay ecosystems and, Biscayne and Florida Aquifers. To that end, the Comprehensive Everglades Restoration Plan (CERP) is providing the foundation for one of the largest ecosystem restoration projects in the world. The SFWMD and the US Army Corps of Engineers have partnered in order to restore, protect and preserve the water resources of central and southern Florida, including the Everglades. Various projects under CERP help ensure the proper quantity, quality, timing, and distribution of

waters to the Everglades and all of South Florida. The goal of CERP is to capture fresh water that now flows unused to the Atlantic Ocean and the Gulf of Mexico redirect it to areas that need it most.

The SFWMD's priorities have focused on creating Water reservation rules to facilitate construction of CERP project components. The City is in support of CERP and other restoration projects listed in the 2018 Lower East Coast (LEC) Water Supply Plan Update that further the Northern/Southern Everglades 20-year commitment to Everglades restoration, including the C-111 South Dade, C-111 Spreader, Biscayne Bay Coastal Wetland BBCW L-31 East Floway, BBCW Deering Estate and BBCW Cutler Wetlands projects.

The South Florida Water Management District is the state agency responsible for water supply in the Lower East Coast planning area which includes the jurisdictional boundaries of Opa-Locka. SFWMD plays a pivotal role in resource protection, through criteria used for Consumptive Use Permitting. As pressure increased on the Everglades ecosystem resource, the Governing Board initiated rulemaking to limit increased allocations dependent on the Everglades system. As a result, the Regional Water Availability Rule was adopted by the Governing Board on February 15, 2007, as part of the SFWMD's water use permit program. This reduced reliance on the regional system for future water supply needs, mandates the development of alternative water supplies, and increasing conservation and reuse.

Even with an ever-increasing population, withdrawals from the Aquifers will be limited, greater conservation will be required to reduce per capita use; and, reclaimed water must continue to be an important alternative water source per the 2008 Leah G. Schad Ocean Outfall Program. The City does not have any domestic wastewater facilities which discharge to the ocean. But supports Miami-Dade County efforts in reducing wastewater outflows and providing for reuse.

The 2013~~3~~8 Lower East Coast Water Supply Plan Update notes that a number of utilities have diversified their water supplies, including treatment and storage technologies, and water conservation programs. These alternatives include constructing brackish Floridan aquifer wells and reverse osmosis treatment plants, reclaimed water treatment and distribution facilities, and aquifer storage and recovery systems. ~~Between 2007 and 2009, 41 MGD of potable water supply capacity was added. From 2010 to 2013, nine utilities built potable water supply (PWS) projects with a capacity of 49 MGD. Approximately 14 percent of the current PWS allocation is now from an alternative water source, primarily brackish groundwater.~~

From FY2013 to FY2018, the SFWMD provided more than $3 million in alternative water supply funding for 11 projects in the LEC Planning Area. Funded projects created 9.25 million gallons per day (mgd) of new reclaimed water capacity and 4.19 mgd of additional reclaimed water distribution or storage in the LEC Planning Area.

The 2018 Lower East Coast Water Supply Plan Update water supply major issues are as follows: 1. Fresh surface water and groundwater are limited; further withdrawals could have impacts on the regional system, wetlands, existing legal uses, and saltwater intrusion. As a result, additional alternative water supplies need to be developed. 2. Surface water allocations from Lake Okeechobee and the Water Conservation Areas are limited in accordance with the Lake Okeechobee Service Area RAA criteria. 3. Construction of additional storage systems (e.g., reservoirs, aquifer storage and recovery systems) to capture wet season flow volumes will be necessary to increase water availability during dry conditions and attenuate damaging peak flow events from Lake Okeechobee. 4. Expanded use of reclaimed water is necessary to meet future water supply demands and the Ocean Outfall Law. 5. Expanded use of brackish groundwater from the Floridan aquifer system requires careful planning and wellfield management to prevent undesirable changes in water quality.

Through Infrastructure Objective AR-1 and Policy AR-1.1 the City supports protecting the integrity of groundwater. Additionally, Conservation Objective C-2 and its implementing policies protects ground and surface resources.

As further outlined in Section 3.~~6~~7 of this Plan the City will support and assist in disseminating information on water conservation related programs and incentives from Miami-Dade County and SFWMD.

3.0 DATA AND ANALYSIS

The intent of the data and analysis section of the Work Plan Update is to describe the information that local governments need to provide to state planning and regulatory agencies as part of their proposed comprehensive plan amendments, particularly those that would change the Future Land Use Map (FLUM) to increase density and/or intensity.

3.1 Population Information

The City's existing and future population figures were derived from the MDWASD Wholesale Customers Report estimate. Below is a comparison in tabular format. As stated previously, for the purpose of water supply planning the ~~LEC~~ MDWASD projections will be utilized. As shown in Table 1, the ~~LEC~~ MDWASD ~~Update~~ Plan states that the MDWASD Service Area has a 2020 population of ~~2,239,773~~ 2,533,548.

For informational purposes, the total 201~~0~~6 population of Miami-Dade County, in which the City's population is included, was ~~2,496,435~~ 2,700,794 (Table ~~A-7~~ B-1. PWS and DSS population projections for the Miami-Dade LEC Planning Area, *201~~3~~8 LEC Water Supply Plan Update*). Of that total the Miami-Dade WASD serviced ~~2,141,885~~ 2,351,064 residents.

Table 1.
City vs. Miami-Dade County Population Comparison

	~~2016~~	~~2020~~	~~2025~~	~~2030~~	~~2035~~
~~City of Opa-locka~~	~~15,507~~	~~15,631~~	~~16,004~~	~~16,376~~	~~16,748~~
~~Unincorporated Area Served by Opa-locka~~	~~1,033~~	~~1,048~~	~~1,063~~	~~1,079~~	~~1,095~~
~~Miami Gardens Served by Opa-Locka~~	~~2,929~~	~~3,036~~	~~3,144~~	~~3,251~~	~~3,359~~
~~MDWASD Service Area~~	~~2,239,773~~	~~2,337,660~~	~~2,435,548~~	~~2,533,436~~	~~2,684,800~~
~~Miami-Dade County Total Pop.~~	~~2,610,526~~	~~2,724,618~~	~~2,838,709~~	~~2,952,800~~	~~3,172,405~~

	2020	2025	2030	2035	2040
City of Opa-locka	16,631	17,372	18,114	18,855	19,596
Unincorporated Area Served by Opa-locka	1,094	1,108	1,121	1,135	1,149
Miami Gardens Served by Opa-Locka	3,262	3,373	3,483	3,594	3,705
Opa-locka Service Area Total	20,987	21,853	22,719	23,585	24,451
MDWASD Service Area	2,407,121	2,533,548	2,659,975		
Miami-Dade County Total Pop.	2,777,310	2,924,743	3,072,175		

Sources: Exhibit C-3, MDWASD Wholesale Customers – Water Service Area Population by Utility Served, MDWASD 10-Year Water Supply Facilities Work Plan (April 2022) and Table 4-2 Population Projections to be Served by WASD.

The City does not have additional data on domestic self-supply systems. After review of City records it has been determined they are incomplete with respect to self-supply systems.

3.2 Maps of Current and Future Areas Served

The City of Opa-locka is located in the MDWASD Hialeah-Preston Subarea.

Figure 3 depicts current and future water service areas of the City. MDWASD is the only service provided to customers within the City's municipal boundaries. There are no areas anticipated to be annexed.

3.3 Potable Water Level of Service Standard

Policy ~~I-1.1~~ CI-3.1 of the ~~Potable Water~~ Capital Improvements Element in the adopted Comprehensive Plan sets the level of service (LOS) standard for potable water at ~~155~~ 120.26 gallons per capita per day. This policy also requires water delivered at a rate between 20 and 100 pounds per square inch. Using population and water demand figures provided by the Miami-Dade Water and Sewer Department, the ~~2014~~ 2022 actual LOS for the City is ~~126.82~~ 120.26 gallons per capita per day. WASD uses ~~137.2~~ 139 gallons per capita systemwide.

The Miami-Dade Water and Sewer Department (WASD) is in charge of maintaining the water distribution and treatment facilities which it wholesales to the City of Opa-Locka. Water service is provided through the John E. Preston Water Plant. Currently the potable water system serves all non-residential and residential land uses in Opa-Locka.

The City will also revise Policy I-1.1 of the Sanitary Sewer, Solid Waste, Drainage, Potable Water & Natural Groundwater Aquifer Recharge Element, setting the level of service standard to deliver ~~126.82~~ 120.26 gallons per capita per day. The proposed policy change matches the recommendation by WASD to deliver ~~126.82~~ 120.26 gallons of potable water per capita per day to the residents of Opa-Locka.

3.4 Sanitary Sewer Level of Service Standard

Policy CI-3.1 of the Capital Improvements Element in the adopted Comprehensive Plan sets the level of service (LOS) standard for sanitary sewer at 122 gallons per capita per day.

The Miami-Dade Water and Sewer Department (WASD) is in charge of maintaining the wastewater collection and treatment facilities for the City of Opa-Locka through the North District Wastewater Treatment Plant.

The City will also revise Policy I-1.1 of the Sanitary Sewer, Solid Waste, Drainage, Potable Water & Natural Groundwater Aquifer Recharge Element, setting the level of service standard to collect 122 gallons per capita per day. The proposed policy changes match the LOS Standard by WASD.

3.45 Population and Potable Water Demand Projections for the City

The South Florida Water Management District *2013~~8~~ Lower East Coast Water Supply Plan Update* (LEC) details the projected potable water demand for MDWASD, which includes the City of Opa-Locka. Since MDWASD provides water to a number of Miami-Dade County municipalities and most of the unincorporated area, the analysis of the City's water needs is determined by the City's percentage of the overall population of the MDWASD service area population (Table 2).

Table 2.
MDWASD – Including Opa-Locka
Current and Projected Water Supply
(MDWASD) Water Use Permit No. 13-00017-W

	~~**ACTUAL**~~	~~**PROJECTED**~~			
	~~2016~~	~~2020~~	~~2025~~	~~2030~~	~~2035~~
~~Population of Opa-Locka Service Area~~	~~19,469~~	~~19,716~~	~~20,211~~	~~20,706~~	~~21,201~~
~~OPL Per Capita (126.82 gallons per day finished water)~~ ~~120.26~~	~~126.82~~	~~126.82~~	~~126.82~~	~~126.82~~	~~126.82~~
~~Potable Water Demands (daily average annual) – City of Opa-Locka service area~~	~~2.47~~	~~2.50~~	~~2.56~~	~~2.63~~	~~2.59~~

~~Notes~~

~~1. Population projections MDWASD Wholesale Customers~~
~~2. Per Capita data from LEC Chapter 6: Water Supply Development Projects, p. 248~~

	ACTUAL	**PROJECTED**			
	2020	2025	2030	2035	2040
Population of Opa-Locka Service Area	20,987	21,853	22,719	23,585	24,451
OPL Per Capita (126.82 gallons per day finished water)	120.26	120.26	120.26	120.26	120.26

Potable Water Demands (daily average annual) – City of Opa-Locka service area	2.52	2.63	2.73	2.84	2.94

Notes:

1. Population projections MDWASD Wholesale Customers
2. Per Capita data from ~~LEC Chapter 6: Water Supply Development Projects, p. 248~~ MDWASD 10-Year Water Supply Facilities Work Plan, Appendix C, Exhibit C-2, p. 368 (April 2022)

3.~~5~~6 Water Supply Distribution Provided by the City of Opa-Locka

MDWASD is a regional water and wastewater utility that furnishes potable water service to approximately ~~2.2~~ 2.5 million inhabitants and tens of thousands of commercial establishments. The service area covers numerous municipalities and most of the unincorporated areas of Miami-Dade County. The City is a wholesale customer and distributes potable water to the City's residents or businesses. Additionally, potable water is supplied to portions of the City of Miami Gardens and unincorporated Miami-Dade County. In August 2014 the City, through the Florida Department of Environmental Protection Drinking Water State Revolving Fund Program, commissioned a study entitled Potable Water Infrastructure Improvements. This study reviewed Alternatives to upgrade the City's potable water distribution system. To date and due to funding shortfalls work has not ~~been~~ begun. The City continues to evaluate its funding options, including grants.

3.~~6~~7 Water Supply Provided by Miami-Dade County WASD

As stated above, the MDWASD System supplies potable water to over 2.~~2~~5 million persons, including residents and businesses within the City, and is an interconnected system of three subareas. Other water suppliers within Miami-Dade County include: North Miami Beach, North Miami, Homestead and Florida City. Currently within the MDWASD Service Area there are 15 municipal wholesale customers (including the City of Opa-Locka).

The information contained in the City's Comprehensive Development Master Plan ~~Amendments~~ adopted February 4, 2015 and the Miami-Dade WASD ~~2~~10-year Water Supply Facilities Work Plan ~~(2014-2033) Support Data~~ (~~November 2014~~ April 2022), the *Lower East Coast Water Supply Plan Update* (LEC) approved by the South Florida Water Management District (SFWMD) on ~~October 10, 2013~~ November 8, 2018, and additional information found within Water Use Permit 13-00017-W are herein incorporated by reference. The Water Use Permit which was modified and approved by the SFWMD on ~~February 9, 2015~~ March 8, 2022, will now expire on ~~February 9, 2035~~ December 27, 2065.

The following Miami-Dade County CDMP Policy supports the coordination with the SFWMD LEC Update:
WS-6D. In the development of its future potable water supplies, Miami-Dade County shall,

to the maximum extent feasible, utilize methods which preserve the integrity of the Biscayne Aquifer, protect the quality of surface water and related ecosystems, consider and are compatible with the South Florida Water Management District's ~~2013~~ Lower East Coast Regional Water Supply Plan Update and the current Water Use Permit, and comply with the land use and environmental protection policies of the Miami-Dade County CDMP, the Strategic Regional Policy Plan for South Florida, and the State Comprehensive Plan.

The City of Opa-Locka is served by the Hialeah-Preston sub-area water treatment plant. The Hialeah-Preston (H-P) subarea is comprised of dedicated low-pressure pipelines, remote storage tanks, pumping facilities and high pressure systems. This system delivers water to Hialeah, Miami Springs, the City of Miami and other portions of northeastern Miami-Dade County, generally north of Flagler Street. The Hialeah Reverse Osmosis (R.O.) plant was completed in October 2013 and is providing water to the City of Hialeah and unincorporated Miami-Dade County.

The Hialeah-Preston subarea water treatment plants are supplied by four water supply wellfields which extract water from the Biscayne Aquifer. The total designed installed capacity from the four wellfields in the Hialeah-Preston subarea is approximately 295 million gallons per day (MGD). The Hialeah-Preston subarea also accesses water from the Floridan Aquifer by ~~five~~ six wells that have a finished water supply capacity of 10 MGD, 7.5 MGD well capacity has been completed with the remaining 2.5 MGD well capacity to be completed by the end of ~~2016~~ 2022. In addition to these wellfields, WASD's plans for ASR include the Southwest and West Wellfield.

WASD anticipates using these wells for storage of fresh Biscayne Aquifer water during the wet season (when operating water levels in the canal allows) for extraction and use in the dry season. In order to use the Upper Floridan Aquifer wells, the WASD designed an ultra-violet (UV) light disinfection system for each ASR site to treat the Biscayne Aquifer water before injecting it into the Floridan Aquifer. M-D WASD Capital Improvements Projects impacting the City are referenced in **Section 5.0** of this Plan Update.

3.~~7~~8 Conservation

Water conservation is the key to maintaining the health and productivity of the Surifical and Floridan Aquifers. Promoting water conservation equipment, techniques, and practices will benefit customers economically and maintain a realistic water demand picture for utilities. Protection of the aquifer system and wellfields (Figure 3.) through conservation and reuse, recharge enhancement, limitations on withdrawal, regulation of land use, and maintenance of minimum flows and levels will ensure the availability of an adequate water supply for all competing demands, maintain and enhance the functions of natural systems and preserve water quality.

The City of Opa-Locka works in coordination with MDWASD, SFWMD and state efforts aimed at promoting conservation through a variety of means including:

- Water Use Efficiency requirements included in the Code of Miami-Dade County

- Limiting Irrigation Hours
- Florida-Friendly Landscape Ordinance
- Rain Sensor Ordinance
- Water Conservation Rate Structure
- Leak Detection and Repair Program
- Public education
- Offering low-cost kits to its customers to reduce water use in their homes (High-Efficiency Fixtures).

For more information about WASD's Water Conservation Program visit http://www.miamidade.gov/conservation/home.asp

3.~~7~~8.1 County-wide Efforts

Section 4.5 Water Conservation and Reuse of the Miami-Dade WASD ~~2~~10-year Water Supply Facilities Work Plan (~~2014-2033~~ April 2022) ~~Support Data (November 2014)~~ outlines additional MDWASD efforts (pages 4-~~6~~7 and ~~7~~8).

Presently, water utilities are saving substantial amounts of water through strategic water-efficiency programs and Best Management Practices (BMP) included in their Water Use Efficiency Plan. The savings from water conservation often translate into more potable water available for residential and non-residential use, capital and operating savings, which allow systems to defer or avoid significant expenditures for water supply facilities and wastewater facilities. As a result of these efforts, the County has achieved 16.19 MGD of water saving through fiscal year 2021.

The City continues to remain in full support of the water conservation initiatives adopted by the SFWMD and Miami-Dade County.

While the City is not responsible for the Comprehensive Everglades Restoration Project, it is supportive of the regional water conservation efforts related to this regional rehydration of the Florida Everglades. The City is also supportive of mandating yard water restrictions that have been directed by the South Florida Regional Water Management District. There are no water conservation projects identified in the City's Capital Improvements Element or Capital Improvements Schedule.

The City will continue to coordinate future water conservation efforts with WASD and SFWMD to ensure that proper techniques are applied. In addition, the City will continue to support and expand existing goals, objectives and policies in the ~~GMP~~ City's Comprehensive Development Master Plan that promotes water conservation in a cost-effective and environmentally sensitive manner. The City will continue to actively support SFWMD and Miami-Dade County in the implementation of new regulations or programs that are designed to conserve water.

Reuse

For the past several years, the State of Florida ~~is leading~~ has led the nation in water reuse. The water reuse effort in the state is primarily led by utilities, local governments, the water management districts and state agencies. The intent of ~~their efforts~~ this is to implement water reuse programs that increase the volume of reclaimed water used and promotes public acceptance of reclaimed water. ~~The City is in full support of the water reuse initiatives under consideration by both the SFWMD and Miami-Dade County. The County has committed to implement a total of 117.5 mgd of water reuse as noted in the County's 20-year water use permit.~~

The County's projected finished water demands are now markedly lower than anticipated when the first 20-year water use permit application was submitted. As such, wastewater reuse to address water supply demands is no longer required, and other alternative water supplies (Floridan aquifer, water conservation, C-51 reservoir, etc.) have been determined to be more viable and shall be considered in the future. WASD is currently implementing a total of 16.49 MGD of reuse at each of the Wastewater Treatment Plants, primarily for in-plant (process water) use. In addition, WASD will be providing up to 15 MGD of reclaimed water from the South District Wastewater Treatment Plant to the FPL facilities at Turkey Point, per Miami-Dade County Resolution No. R-579-20 approved by the BCC on June 16, 2020.

3.~~7~~8.2 City Specific Actions, Programs, Regulations, or Opportunities

The City will coordinate future water conservation and reuse efforts with MDWASD and the SFWMD to ensure that proper techniques are applied. In addition, the City will continue to support and expand existing goals, objectives and policies in the comprehensive plan that promotes water conservation and reuse in a cost-effective and environmentally sensitive manner. The City will continue to actively support the SFWMD and MDWASD in the implementation of new regulations or programs that are design to conserve water during the dry season. Finally, the City will administer its own water conservation practices. The City has also implemented a tiered rate structure for potable water.

The City has been successful in implementing, as applicable, its water conservation policies and supporting efforts by Miami-Dade County and the South Florida Water Management District in their efforts to promote water conservation and reuse. The City promotes the policies, requirements and procedures as outlined in Section 3.~~7~~8, including those found within the Miami-Dade County Water Use Efficiency Standards Manual (2009). As shown by the City's per capita consumption rate of ~~126.82~~ 120.26 gallons per capita vs. ~~147~~ 139 generally countywide, the City has been a leader by this metric. Recently, the City of Opa-locka customer water billing function has transitioned to Miami-Dade County WASD. As a result, additional water conservation information is being

disseminated to property owners within the City, unincorporated area and Miami Gardens (See MDWASD Water Conservation Plan, November 2020).

3. ~~7~~8.3 MDWASD Specific Regulations

MDWASD, and therefore the City, implement water conservation through the following Ordinances: Irrigation Hours, Florida-Friendly Landscape, High-Efficiency Fixtures, Rain Sensor, Water Conservation Rate Structure, Leak Detect & Repair Program and Public Education Programs. The City will also continue to comply with all the Water Use Efficiency requirements included in the Code of Miami-Dade County. Additionally, the following code requires that the City is governed by County regulations:

Sec. 22-174. Compliance with County Standards
Minimum standards or requirements for landscaping and irrigation within the City, if not addressed in this Article shall only then be governed by the following, as may be amended: 1. Chapter 18A, Miami-Dade County Landscaping Ordinance and Landscape Manual 2. Chapter 18B, Miami-Dade County Right-Of-Way Landscape Ordinance 3. Chapter 24, Miami-Dade County Environmental Protection Ordinance 4. Chapter 32, Miami-Dade County Water and Sewer Regulations 5. In instances where conflicts between Articles or Chapters occur, the Director shall determine upon review of a proposed application which Article sections shall apply.

4.0 INTERGOVERNMENTAL COORDINATION

The provision of water supply needs in the City of Opa-Locka is achieved in coordination with local, county, and regional partners including Miami-Dade County WASD and South Florida Water Management District. MDWASD is the City's primary water partner as they provide the City its water service utilities. As part of the water supply planning process and intergovernmental coordination in general the City has reviewed the Miami-Dade County Plan while outside agencies will review the City's Plan. MDWASD ensures that water supply services are provided to the majority of ~~residents~~ customers of Miami-Dade County in the most efficient and effective manner. SFWMD acts to protect the region's water supply resources and coordinates the implementation of state water regulations and policies through local water planning efforts and water supply services.

In this update of the ~~original~~ 10-Year Water Supply Facilities Work Plan, the City has reviewed its water supply related Objectives and policies and updated them as necessary. Changes to the Objectives and policies are outlined in Section 6.0. Policies are included which detail coordination efforts with both MDWASD and SFWMD. As a wholesale customer, the City must coordinate through data collection and billings the adequate supply of water and conservation practices with MDWASD and implement the requirements of County Code.

Recently, the City of Opa-locka customer water billing function has transitioned to Miami-Dade County WASD. As a result, additional water conservation information is being disseminated (See MDWASD Water Conservation Plan, November 2020). The City strives to continue coordination with Miami-Dade County WASD for pump station replacement and other necessary upgrades to the potable water system.

5.0 CAPITAL IMPROVEMENTS

The information contained in the City's Comprehensive Development Master Plan ~~Amendments adopted February 4, 2015~~ and the Miami-Dade WASD ~~2~~10-year Water Supply Facilities Work Plan (~~2014-2033~~ April 2022) ~~Support Data (November 2014)~~, the *201~~3~~8 Lower East Coast Water Supply Plan Update* (LEC) approved by the South Florida Water Management District (SFWMD) on ~~October 10, 2013~~ November 8, 2018 and additional information found within Water Use Permit 13-00017-W are herein incorporated by reference. The Water Use Permit which was modified and approved by the SFWMD on ~~February 9, 2015~~ March 8, 2022, will now expire on ~~February 9, 2035~~ December 27, 2065.

As a wholesale customer the City is not responsible for the provision of infrastructure for potable water treatment and distribution. Below is a partial list of MDWASD projects and changes to its Capital Improvement Schedule.

As stated previously in Section 3.~~6~~7 the City is within the Hialeah-Preston Subarea. The MDWASD Capital Plan Bond/Fund Allocation for water projects through FY2029-2030 is $1.6 Billion. The following major Capital Improvements Projects may impact the City and are as further described in the Miami-Dade WASD ~~2~~10-year Water Supply Facilities Work Plan (~~2014-2033~~ April 2022) ~~Support Data (November 2014) Table 12~~ Appendix B 2021-2030 Multi-Year Capital Plan:

1) Systemwide Wellfield Improvements;
2) Systemwide Water ~~Main~~ Line Extensions and Improvements;
3) ~~Central M-D Water Transmission Mains Improvements: and,~~;
4) ~~Alexander Orr, Jr.~~ Water Treatment Plants ~~Expansion~~ Rehabilitation~~.~~;
4) Purchase of Lake Property Adjacent to Northwest Wellfield;
5) Miami Springs Wellfield Rehabilitation – Phase 1-3; and,
6) C-51 Reservoir Water Project.

~~Alternative Water Supply Projects~~
~~10 MGD Hialeah RO WTP Phase 1 – Operational October 2013 (7.5 MGD well capacity constructed)~~
~~20 MGD South Miami Heights WTP – under design (17.5 MGD Biscayne Aquifer/2.5 MGD Florida Aquifer)~~
~~CANCELLED AWSP's~~

~~Hialeah RO WTP Phase 2 and 3~~
~~Blending and canal recharge projects~~

~~Reuse Projects~~
~~Updated Reuse Projects~~
~~Existing Reuse at Three Wastewater Treatment Plants~~
~~Biscayne Bay Coastal Wetlands Rehydration~~
~~Pilot Completed~~
~~Full Scale capacity~~
~~90 MGD FPL for new cooling towers~~
~~CDWWTP, SDWWTP, New WDWWTP Florida Aquifer re-charge to meet Ocean Outfall Legislation (Total 27.6 MGD)~~
~~CANCELLED REUSE PROJECTS~~
~~Phase 1 and 2 Canal Re-charge for Alexander Orr WTP~~

~~Water Treatment Plants~~
~~Hialeah RO WTP~~
~~On-line October 2013~~
~~10 MGD (7.5 MGD Operational)~~
~~50% MDWASD/50% Hialeah~~
~~South Miami Heights~~
~~On-line by December 31, 2019~~
~~17.5 MGD Finished Water from Florida Aquifer~~
~~2.55 MGD Finished Water from Biscayne Aquifer~~

6.0 GOALS, OBJECTIVES AND POLICIES

The following Comprehensive Plan ~~goals,~~ objectives and policies are consistent with the Water Supply Facilities Work Plan Update.

Add the following new or amended Objectives, policies and Monitoring Measures as follows:

Infrastructure Element

Policy I-1.1: To assure adequate level of service, the following LOS standards are hereby adopted, and shall be used as the basis for determining the facility capacity and the demand generated by a development.

FACILITY	LEVEL OF SERVICE STANDARDS
Sanitary Sewer Facilities	The ~~system shall maintain the~~ wastewater treatment plants shall operate with a physical capacity of no less than ~~to collect~~

	~~and dispose of 102 percent of~~ the average daily influent sewage flow for the ~~system demand for the~~ preceding ~~five years~~ 12 months. Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards. The system shall collectively maintain the capacity to collect and dispose of no less than 102 percent of the average daily influent sewage system flow for the preceding five years accounting for reserved capacity. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months. The annual average daily influent sewage flow shall be calculated as the average of the daily volume received at the facility over a 12-month period. ~~All treatment plants shall maintain the capacity to treat no less than the average daily sewage flow.~~ ~~Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards.~~ The per capita Level of Service standard for sanitary sewer shall be 122 gallons per capita per day.
Fire Flow	Water shall be delivered to users at a pressure no less than 20 pounds per square inch (psi) and no greater than 100 psi. Unless otherwise approved by the Miami-Dade Fire Rescue Department, minimum fire flows based on the land use served shall be maintained as

follows:

Land Use:	Min. Fire Flow (gpm) ~~Gallons Per Minute~~
Single Family Residential Estate	~~750~~ 500
Single Family and Duplex; Residential on minimum lots of 7,500 sf	750
Multi-Family Residential (Low Medium Density), Semiprofessional Offices	1,500
Multi-Family Residential (Medium and High Density)	2,000
Hospitals, Schools, Business and Industry	~~2~~3,000
~~Commercial/Industrial~~	~~3,000~~

* * *

Potable Water	Regional treatment. System shall operate with a maximum daily rated capacity that is no less than 2% above maximum daily flow for the preceding year, and an average daily capacity 2% above the average daily system demand for the preceding 5 years. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months. User LOS. Maintain capacity to produce and deliver ~~126.82~~ 120.26 gallons per capita per day systemwide. Water Quality. Shall meet all county, state and federal primary potable water standards. Countywide Storage. Storage capacity for finished water shall equal no less than 15% of countywide average daily demand.

Objective I-5 Monitoring Measures:

1. Achievement of regional water conservation goals.
2. The City's Work Plan Update shall remain consistent with the County's ~~2~~10-Year Supply Facilities Work Plan Update, which is compatible with the Miami Dade County Water Use Permit renewals and with projects as listed in the South Florida Water Management District's 201~~3~~8 Lower East Coast Regional Water Supply Plan Update. The Work Plan will be updated, at a minimum, every 5 years and within 18 months after the South Florida Water Management District's approval of an updated Lower East Coast Regional Water Supply Plan.

Policy I-5.4: The City of Opa-Locka must adopt by reference into its Comprehensive Plan the City of Opa-Locka 201~~5~~22 ~~2~~10-year Water Supply Facilities Work Plan Update (Work Plan Update) adopted ~~May 25, 2016~~ XXXX, as required by section 163.3177(6)(c), F.S. within 18 months after the governing board of the South Florida Water Management District approves its 201~~3~~8 Lower East Coast Water Supply Plan Update. The Work Plan will be updated, at a minimum, every 5 years. The City of Opa-Locka 201~~5~~22 ~~2~~10-year Water Supply Facilities Work Plan Update is designed to: assess current and projected potable water demands; evaluate the sources and capacities of available water supplies; and, identify those water supply projects, using all available technologies, necessary to meet the City's water demands for a 20-year period.

Policy I-5.5: Comply with the 20~~15~~22 ~~2~~10-year Water Supply Facilities Work Plan Update adopted on ~~May 25, 2016~~ XXXX and incorporate such Work Plan Update into the City of Opa-Locka Comprehensive Plan.

Conservation Element

Policy C-3.5: The implementation of the 20~~15~~22 ~~2~~10-year Water Supply Facilities Work Plan Update will ensure that adequate water supplies and public facilities are available to serve the water supply demands of the City's growing population.

Policy C-3.7: By July 1, 2024, the City shall adopt conservation measures by ordinance in conformance with the SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures (as detailed in 40E-24, Florida Administrative code). Specifically, the City ordinance shall prohibit landscape irrigation during those periods of the day when irrigation efficiency significantly decreases, and limit landscape irrigation water use to two days per week. The City ordinance shall further encourage users to apply no more than 3/4 -inch to 1-inch of water per week on their lawns and landscape areas and only as needed to supplement rainfall.

Implementation:

- Who?The City
- How?Through the enforcement of SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures
- When? Upon Ordinance adoption

Intergovernmental Coordination

Objective IC-1 Monitoring Measures:

1. Demonstrated compliance with policies IC-1.1 – IC1.8 (ongoing participation in intergovernmental coordination efforts).

Policy IC-1.6: The City shall coordinate the planning of potable water and sanitary sewer facilities and services and level-of-service standards within the Miami-Dade County Water and Sewer Department, Department of Regulatory and Economic Resources, the South Florida Water Management District, and the 201~~3~~8 Lower East Coast Water Supply Plan Update.

Policy IC-1.7: The City will coordinate with the South Florida Water Management District concerning its jurisdictional authority as necessary and

support its efforts concerning the *201~~3~~8 Lower East Coast Water Supply Plan Update*, ACCELER8 Everglades and CERP and the Biscayne Bay Coastal Wetlands Project to protect an Outstanding Florida Water – Biscayne Bay. The City hereby adopts by reference the Miami-Dade County Comprehensive Development Master Plan Amendments adopted ~~February 4, 2015~~ January 19, 2023, the Miami-Dade Water and Sewer Department ~~2~~10-year Water Supply Facilities Work Plan ~~(2014-2033) Support Data (November 2014)~~, the *201~~3~~8 Lower East Coast Water Supply Plan Update* (LEC) approved by the South Florida Water Management District (SFWMD) on ~~October 10, 2013~~ November 8, 2018 and additional information found within Water Use Permit 13-00017-W are herein incorporated by reference. The Water Use Permit which was modified and approved by the SFWMD on ~~February 9, 2015~~ March 8, 2022, will now expire on ~~February 9, 2035~~ December 27, 2065.

Capital Improvements

Policy CI-3.1: The City shall utilize the following level of service standards as the basis for determining facility capacity and the demand generated by development.

FACILITY	LEVEL OF SERVICE STANDARDS
Sanitary Sewer Facilities	The ~~system shall maintain the~~ wastewater treatment plants shall operate with a physical capacity of no less than ~~to collect and dispose of 102 percent of~~ the average daily influent sewage flow for the ~~system demand for the~~ preceding ~~five years~~ 12 months. Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards. The system shall collectively maintain the capacity to collect and dispose of no less than 102 percent of the average daily influent sewage system flow for the preceding five years accounting for reserved capacity. The maximum daily flow shall be determined by calculating the average of the highest five single

<table>
<tr><td></td><td>day flows for the previous 12 months. The annual average daily influent sewage flow shall be calculated as the average of the daily volume received at the facility over a 12-month period.

~~All treatment plants shall maintain the capacity to treat no less than the average daily sewage flow.~~

~~Effluent discharged from the wastewater treatment plants shall meet all federal, State and County standards.~~

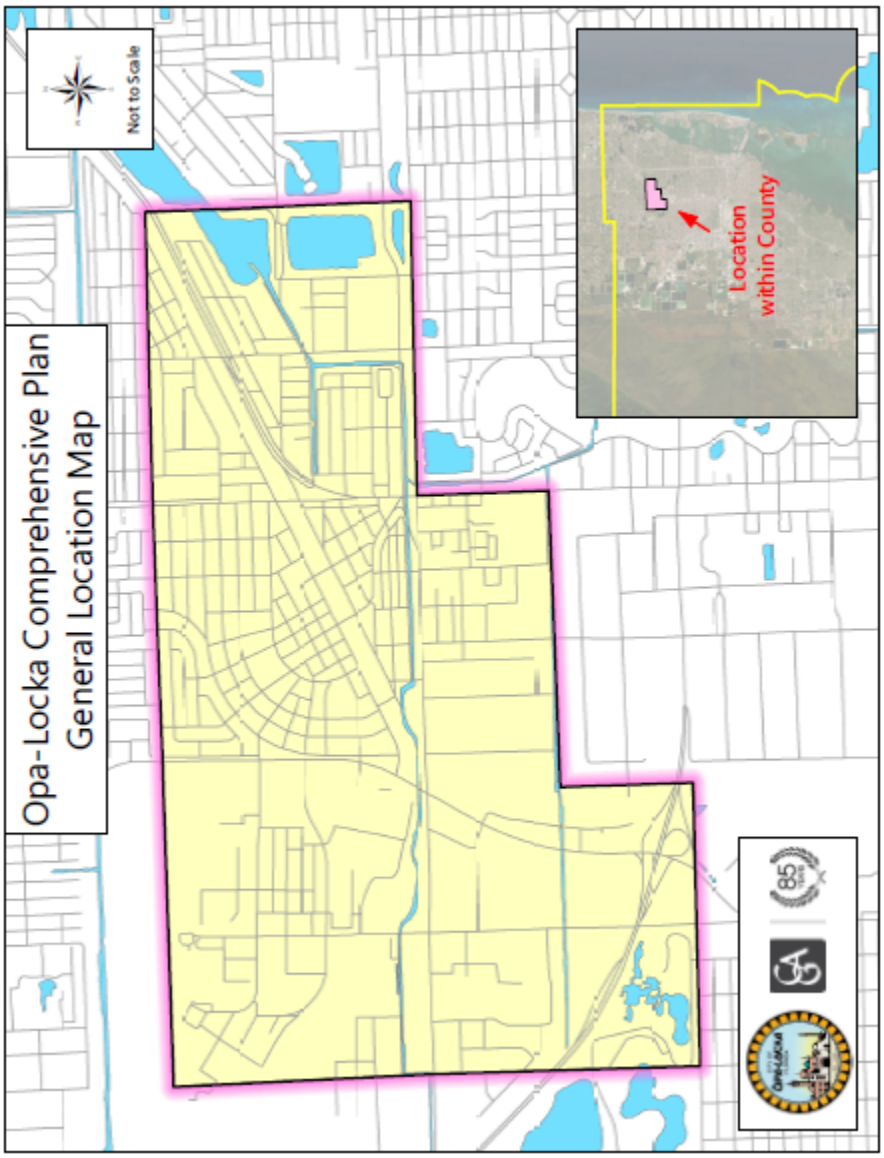
The per capita Level of Service standard for sanitary sewer shall be 122 gallons per capita per day.</td></tr>
<tr><td>Fire Flow</td><td>Water shall be delivered to users at a pressure no less than 20 pounds per square inch (psi) and no greater than 100 psi. Unless otherwise approved by the Miami-Dade Fire Rescue Department, minimum fire flows based on the land use served shall be maintained as follows:

<table>
<tr><th>Land Use:</th><th>Min. Fire Flow (gpm)
~~Gallons Per Minute~~</th></tr>
<tr><td>Single Family Residential Estate</td><td>~~750~~
500</td></tr>
<tr><td>Single Family and Duplex; Residential on minimum lots of 7,500 sf</td><td>750</td></tr>
<tr><td>Multi-Family Residential (Low Medium Density), Semiprofessional Offices</td><td>1,500</td></tr>
</table>
</td></tr>
</table>

	<table><tr><td><u>Multi-Family Residential (Medium and High Density)</u></td><td><u>2,000</u></td></tr><tr><td>Hospitals, Schools, <u>Business and Industry</u></td><td><s>2</s><u>3</u>,000</td></tr><tr><td><s>Commercial/Industrial</s></td><td><s>3,000</s></td></tr></table>
* * *	
Potable Water	Regional treatment. System shall operate with a maximum daily rated capacity that is no less than 2% above maximum daily flow for the preceding year, and an average daily capacity 2% above the average daily system demand for the preceding 5 years. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months. User LOS. Maintain capacity to produce and deliver <s>126.82</s> <u>120.26</u> gallons per capita per day systemwide. Water Quality. Shall meet all county, state and federal primary potable water standards. Countywide Storage. Storage capacity for finished water shall equal no less than 15% of countywide average daily demand.

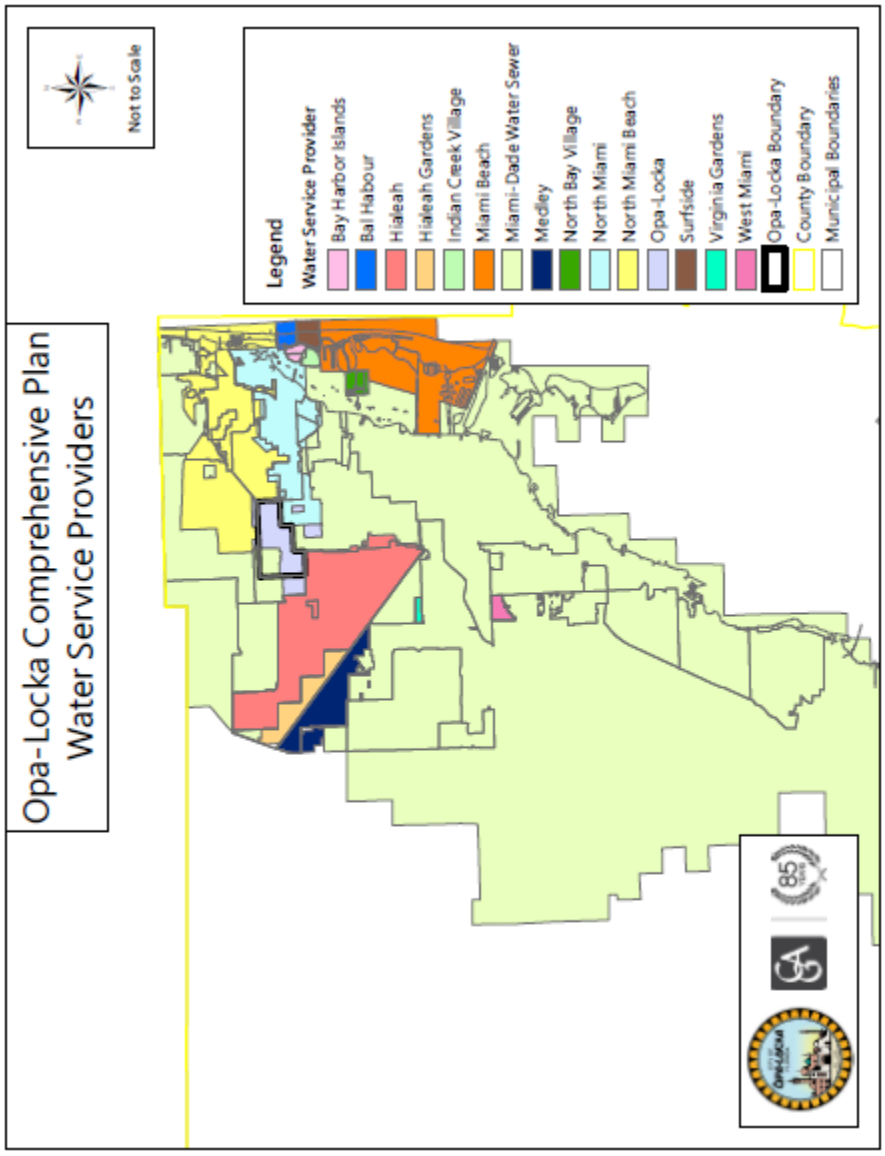
FIGURES

Figure 1



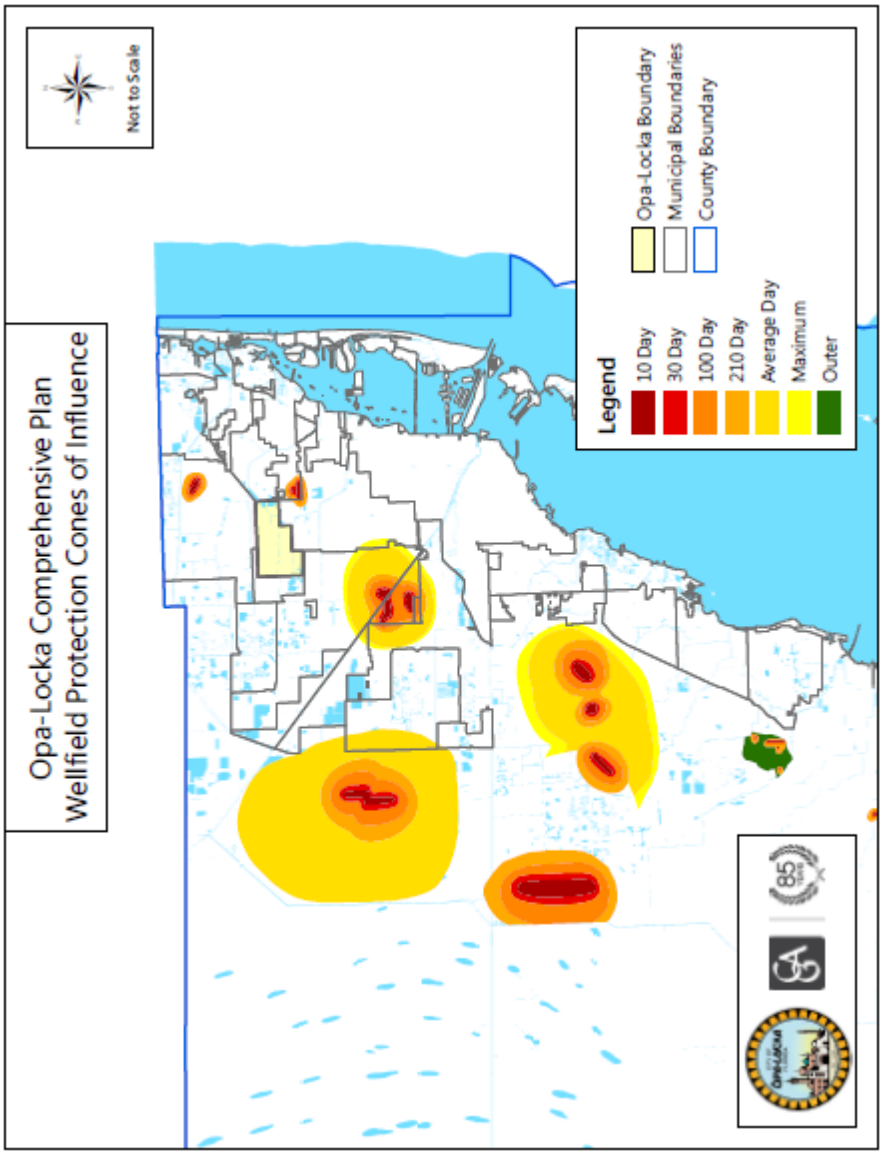
Source: Miami-Dade County Land Management Database, October 2023

Figure 2



Source: Miami-Dade County Land Management Database, October 2023

Figure 3



Source: Miami-Dade County Land Management Database, October 2023

ATTACHMENTS

Miami-Dade County Final Recommendations Report to Amend the CDMP
(Adopted January 19, 2023)

Miami-Dade County 10-Year Water Supply Facilities Work Plan
(April 2022)

MDWASD Water Conservation Plan
(November 2020)

Sponsored by: Interim City Manager

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PIGGYBACKING THE SOURCEWELL COOPERATIVE PROGRAM AGREEMENT 101221-VTR WITH ENVIRONMENTAL PRODUCTS GROUP, INC. TO ACCEPT A FOUR-YEAR CAPITAL LEASE AGREEMENT FOR THE PURCHASE OF A VACTOR MODEL 2115I MOUNTED ON A NEW 2023 FREIGHTLINER MODEL 114SD TRUCK CHASSIS, IN THE AMOUNT OF FOUR HUNDRED SEVENTY THOUSAND EIGHT HUNDRED FORTY-ONE DOLLARS AND TWENTY-FOUR CENTS ($470,841.24); PROVIDING FOR INCORPORATION OF RECITALS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on October 5, 2023, the City Commission approved Resolution 22-045 for the procurement of a new Vactor Truck (Vactor Model 2115i mounted on a 2023 Freightliner Model 114SD truck chassis) with the intent to lease and finance for a five-year term with an interest rate of 4.57% and annual payments of One Hundred Six Thousand Two Hundred Thirty-One Dollars and seventy-seven cents ($106,231.77), where at the end of the lease term, the City assumes ownership of the vehicle; and

WHEREAS, no contract has been executed, and the Interim City Manager recommends financing the lease for a four-year period; and

WHEREAS, the vehicle is anticipated to be delivered during the month of January, 2024, at which time the leasing contract would begin. An evaluation has been conducted and it has been determined that there will be a slightly lower interest rate of 4.55% which would be a savings to the City and a more attractive financing option; and

WHEREAS, the total cost of the five-year lease to own plan is Five Hundred Thirty-One Thousand One Hundred Fifty-Eight Dollars and eighty-five cents ($531,158.85). The total cost of the four-year lease to own plan is Four Hundred Seventy Thousand Eight Hundred Forty-One Dollars and twenty-four cents ($470,841.24), providing a savings of sixty thousand three hundred seventeen dollars and sixty-one cents ($ 60,317.61); and

WHEREAS, Sourcewell previously awarded a contract to Environmental Products Group, Inc., pursuant to its Request for Proposals (RFP) No. 101221 for Sewer Vacuum, Hydro-Excavation, and Municipal Pumping Equipment with Related

Accessories and Supplies, for a four-year period commencing December 20, 2021 through November 29, 2025. The contract may be extended for a fifth year at Sourcewell's discretion; and

WHEREAS, the City Commission finds that it is in the best interest of the City to piggyback Sourcewell Cooperative Program Agreement 101221-VTR with Environmental Products Group, Inc. to accept a four-year capital lease agreement in the amount of Four Hundred Seventy Thousand Eight Hundred Forty-One Dollars and twenty-four cents ($ 470,841.24).

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, THAT:

Section 1. RECITALS ADOPTED.
The recitals to the preamble herein are incorporated by reference.

Section 2. AUTHORIZATION
The City Commission of the City of Opa-Locka, Florida piggybacks the Sourcewell Cooperative Program Agreement 101221-VTR with Environmental Products Group, Inc. to accept a four-year capital lease agreement for the purchase of a new Vactor Model 2115i mounted on a new 2023 Freightliner Model 114SD truck chassis, in the amount of Four Hundred Seventy Thousand Eight Hundred Forty-One Dollars and twenty-four cents ($ 470,841.24).

SECTION 3. SCRIVENER'S ERRORS.
Sections of this Ordinance may be renumbered or re-lettered and corrections of typographical errors which do not affect the intent may be authorized by the City Manager, following review by the City Attorney, without the need for public hearing, by filing a corrected copy of same with the City Clerk.

SECTION 4. CONFLICT AND REPEALER.

Any provision of any City of Opa-Locka ordinance or regulation or resolution which is in conflict with the provisions of this Ordinance is repealed prospectively to the extent of such conflict.

SECTION 5. LIBERAL CONSTRUCTION.

The terms and provisions of this Ordinance shall be liberally construed to affect the purpose for which it is adopted.

SECTION 6. SEVERABILITY.

If any portion of this Ordinance is for any reason held or declared to be unconstitutional, invalid or void, such holding shall not affect the remaining portions of this Ordinance. If this Ordinance shall be held to be inapplicable to any person, property or circumstances, such holding shall not affect the applicability of this Ordinance to any other person, property or circumstances.

SECTION 7. EFFECTIVE DATE.

This Ordinance shall take effect upon the adoption and is subject to the approval of the Governor or Governor's Designee.

PASSED FIRST READING this _____ day of _____, 2024.

PASSED SECOND READING this_____ day of _____, 2024.

_____
John Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Bass	_____ (Yes)	_____ (No)
Commissioner Kelley	_____ (Yes)	_____ (No)
Commissioner Williams	_____ (Yes)	_____ (No)
Vice Mayor Ervin	_____ (Yes)	_____ (No)
Mayor Taylor	_____ (Yes)	_____ (No)

City of Opa-locka
Agenda Cover Memo

Department Director:	Robert Anathan			**Department Director Signature:**				
City Manager:	Darvin Williams			**CM Signature:**				
Commission Meeting Date:	Jan 10, 2024		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
				X				
Fiscal Impact: *(Enter X in box)* **N/A**	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
	X		**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
						X		
Funding Source: *Account#:*	*(Enter Fund & Dept)* See Attachments		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
	X							
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐		**Strategic Plan Obj./Strategy:** *(list the specific objective/strategy this item will address)*			
		X						
Sponsor Name	City Manager		**Department:** City Manager's Office		City Manager			

Short Title:

Lease Financing – Vactor Truck

Staff Summary:

Issue/Recommendation: Resolution 22-045 authorized the procurement of a new Vactor Truck with lease financing with a five-year term. Staff recommends amending the lease financing to a four-year period.

History: On October 5, 2023, the City Commission authorized the procurement of a Vactor Model 2115i mounted on a 2023 Freightliner Model 114SD truck chassis. This procurement was to be financed with a five-year lease with an interest rate of 4.57% and annual payments of $106,231.77. At the end of the lease term, the City assumes ownership of the vehicle.

Current Activity: The vehicle is anticipated to be delivered this month (January, 2024), at which time the leasing contract will begin. Staff has evaluated a four-year lease with a slightly lower interest rate of 4.55% and believes the savings, as outlined in the Financial Impact Section, are significant enough to make the four-year plan a more attractive financing option.

Financial Impact:

	Five-Year Plan	Four-Year Plan	Savings
Annual Payment	106,231.77	113,960.31	
Interest Rate	4.57%	4.55%	
Years Of Maintenance Included	5.00	4.00	
Total Lease Cost	531,158.85	455,841.24	
Fifth Year Of Maintenance	Incl Above	15,000.00	
Total Five-Year Cost	531,158.85	470,841.24	60,317.61

.Proposed Action:

Staff recommends the City Commission approve the procurement of the Vactor truck with a four-year lease plan.

Attachment:

1. Four-Year Lease Plan
2. Five-Year Lease Plan

Sponsored by: Mayor Taylor

ORDINANCE NO. 23-XX

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, ENTITLED "OFF-STREET PARKING AND LOADING REQUIREMENTS" TO SPECIFICALLY AMEND SECTION 2-152(F) ENTITLED "GENERAL PRINCIPLES" TO PROVIDE FOR OUTDOOR STORAGE OF VEHICLES ONLY IN A DESIGNATED PARKING SPACE, PROHIBITING DOUBLE PARKING AND REQUIRING THAT ALL AREAS ARE FREE FROM UNSIGHTLY CONDITIONS; AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, SPECIFICALLY SECTION 2-160 (C)(4) ENTITLED "PERMITTED OFF-STREET PARKING" TO REQUIRE A CURRENT VALID LICENSE PLATE FOR RESIDENTIAL PARKING AND FURTHER REQUIRING THAT VEHICLES PARKED AS COMMERCIAL AND INDUSTRIAL FACILITIES HAVE A VALID LICENSE PLATE AND OR BILL OF SALE AND WORK ORDER POSTED VISIBLY ON THE DRIVER'S SIDE WINDOW, INCLUDING VIN NUMBER FOR VEHICLE, BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION IN CODE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, City of Opa-Locka departments, to include the City of Opa-Locka's Code Enforcement Department and the City's Planning and Community Development Department have identified opportunities to amend the City's Land Development Regulations pertaining to off-street parking to improve current parking conditions; and

WHEREAS, the City Commission finds that certain amendments to Article VI, Section 22-152(f) of the City's Land Development Regulations, entitled "General Principles"and to Article VI, Section 2-160(C)(4) of the City's Land Development Regulations, entitled "Permitted Off-Street Parking" would be in the best interest of the City of Opa-Locka, Florida.

NOW, THEREFORE, BE IT DULY ORDAINED BY THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA:

Section 1. The recitals to the preamble herein are incorporated by reference.

Section 2. Article VI, Section 22-152(f) of the City's Land Development Regulations, entitled "General Principles" is hereby amended and shall read:

> (F) Off-street parking and loading facilities shall be used solely for the parking of vehicles in operating condition by the patrons, occupants or employees of the use to which such facilities are accessory. No motor vehicle repair work, except emergency service, shall be permitted in association with off-street parking and loading facilities. The storage of commercial vehicles, except for those associated with the use, or merchandise or the sale of vehicles shall be prohibited in a required off-street parking or loading area, except as specifically authorized in this Chapter.
>
> The outdoor storage of vehicles is permitted only in a designated parking space; not obstructing the right of way allowing egress and ingress. Double parking is prohibited. All areas must be free from unsightly conditions including wreaked and or non-operable vehicles unless otherwise authorized by the City's Code of Ordinances. No motor vehicle repair work, except emergency service, shall be permitted in conjunction with an off-street parking and loading facility.

Section 3. Article VI, Section 2-160(C)(4) of the City's Land Development Regulations, Ordinance 15-31, entitled "Permitted Off-Street Parking" is hereby amended and shall read:

> 4. No vehicle without a current valid license plate shall be permitted to park in a residential~~, commercial or industrial area (except as provided herein) or public zoned area.~~ Vehicles parked at a commercial and or industrial facility must have a valid license plate and or bill of sale and work order posted visibly on the driver 's side window, including the following information: VIN number for vehicle, business name, address, and telephone number.

Section 4. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of this Ordinance.

Section 5. All ordinances or resolutions or parts of ordinances or resolutions in conflict herewith, are hereby repealed.

Section 6. This Ordinance shall be codified in the Code of Ordinances when the code is recodified.

Section 7. This Ordinance shall, upon adoption, become effective as specified by the City of Opa-Locka Code of Ordinances and the City of Opa-Locka Charter.

PASSED FIRST READING this _____ day of _____, 2023.

PASSED SECOND READING this _____ day of _____, 2023.

_____
John H. Taylor, Mayor

ATTEST:

_____
Joanna Flores, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
Burnadette Norris-Weeks, P.A.
City Attorney

Moved by: _____

Seconded by: _____

VOTE:

Commissioner Williams	(Yes)_____	(No) _____
Commissioner Kelley	(Yes)_____	(No) _____
Commissioner Bass	(Yes)_____	(No) _____
Vice-Mayor Ervin	(Yes)_____	(No) _____
Mayor Taylor	(Yes)_____	(No) _____

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City of Opa-locka
Agenda Cover Memo

City Manager:	Darvin Williams			**CM Signature:**	DocuSigned by: Darvin Williams			
Commission Meeting Date:	*10.11.2023*		**Item Type:** *(Enter X in box)*	**Resolution**	**Ordinance**		**Other**	
					X			
Fiscal Impact: *(Enter X in box)*	**Yes**	**No**	**Ordinance Reading:** *(Enter X in box)*		**1st Reading**		**2nd Reading**	
		X	**Public Hearing:** *(Enter X in box)*		**Yes**	**No**	**Yes**	**No**
					X		**X**	
Funding Source: *Account#:*	*(Enter Fund & Dept)* Ex: NA		**Advertising Requirement:** *(Enter X in box)*		**Yes**		**No**	
							X	
Contract/P.O. Required: *(Enter X in box)*	**Yes**	**No**	**RFP/RFQ/Bid#:**					
		X						
Strategic Plan Related *(Enter X in box)*	**Yes**	**No**	**Strategic Plan Priority Area:** **Enhance Organizational** ☐ **Bus. & Economic Dev** ☐ **Public Safety** ☐ **Quality of Education** ☐ **Qual. of Life & City Image** ☐ **Communication** ☐		**Strategic Plan Obj./Strategy:** **(***list the specific objective/strategy this item will address)*			
	X	**X**						
Sponsor Name	Mayor Taylor		**Department:**		City Commission			

Short Title:

An ordinance of the City Commission of the City of Opa-locka amending and adding to Article IV Section 22-152 and Section 22-160 entitled- "Off-Street parking and loading requirements."

Staff Summary:

Through conversations with the City's business community, the City's Code Enforcement Manager and Officers identified opportunities to improve the City's Code to ensure that the outdoor parking facilities for businesses in the city are accessible and maintained in orderly conditions, while allowing the business in the city to provide services to their patrons. The proposed legislation would make the following amendments and additions to the City's current Ordinances:

Revisions to Section 22-152 (F) shall read **The outdoor storage of vehicles is permitted only in a designated parking space; not obstructing the right of way allowing egress and ingress. Double parking is prohibited. All areas must be' free from unsightly conditions including wreaked and or non-operable vehicles unless otherwise authorized**. **No motor vehicle repair work, except emergency service, shall be permitted in association with off-street parking and loading facility.**

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Additionally, Sec 22-160 (4) shall state "No vehicle without a valid license plate shall be permitted to park in a residential area. Vehicles parked at a commercial and or industrial facility must have a valid license plate and or bill of sale and work order posted visibly on the driver window, including the following information: VIN number, business name, address, and phone number.

Financial Impact – There is no financial impact from this proposed ordinance amendment.

Proposed Action:

It is recommended the City Commission of the City of Opa-locka adopt legislation amending and adding to Article IV Section 22-152 and Section 22-160 entitled- "Off-Street parking and loading requirements."

Attachment:

Article IV: Off-street parking and loading requirements

These blenders might cut you or burn your things. About 4.8 million have been recalled

BY DAVID J. NEAL
dneal@miamiherald.com

A blender should cut fruit, not your skin. Nor should it burn your possessions. So, BlendJet recalled about 4.9 million BlendJet 2 Portable Blenders sold in the United States and Canada.

"The recalled blenders can overheat or catch fire and the blender blades can break off, posing fire and laceration hazards to consumers," the U.S. Consumer Product Commission recall notice states.

That's not an idle concern. The recall notice says BlendJet knows about 329 times the blades broke; 49 times people got burned; one person who got sliced; 17 times the blenders overheated or started fires, causing $150,000 of property damage.



U.S. Consumer Product Safety Commission

BlendJet 2 Portable Blenders have been recalled.

BlendJet wants customers with the blenders, which were sold from October 2020 through this November, to reach out to the company for a free replacement of the base. Do this by cutting the rubber seal on the base into three or more pieces, shoot a photo with the pieces and the serial number on the base and email it to safety@blendjet.com or upload it to the recall website.

To see if this recall concerns your blender, you can go to BlendJet's site and enter your blender's serial number.

For other questions, either go to the recall website hyperlinked above or call BlendJet Monday through Friday, 8 a.m. to 10 p.m., Eastern time at 844-334-0562.

David J. Neal: 305-376-3559, @DavidJNeal

Miami Gardens, Palm Beach restaurant problems include rodents and flies

BY DAVID J. NEAL
dneal@miamiherald.com

A Miami Gardens and Rivera Beach restaurant were part of this week's Sick and Shut Down List of Miami-Dade and Palm Beach restaurants that failed inspection.

Once again, we remind you, we don't do the inspecting, and we don't choose who gets inspected. Direct your complaints to the Florida Department of Business and Professional Regulation.

In alphabetical order:

Caribbean Kitchen 305, 760 NW 183rd St., Miami Gardens: Routine inspection, 20 total violations, six High Priority violations.

We told you about this place with its hot water deficiencies — which means washing and cleaning deficiencies —and rodent problems earlier this week.

The kitchen was open again after it corrected the issue for the next day's re-inspection.

Mulligan's Beach House Singer Island, 2551 N. Ocean Ave., Riviera Beach: Complaint inspection, six total violations, five High Priority violations.

Eight flies at the inside bar were "flying around, landing on liquor bottles and the wall behind" the bar. Rodents left 34 droppings on the kitchen floor.

Mulligan's passed a second re-inspection two days after the original inspection.

CITY OF OPA-LOCKA, FLORIDA
NOTICE TO THE PUBLIC

NOTICE IS HEREBY GIVEN that the City Commission of the City of Opa-locka, Florida will hold public hearings at the Regular Commission Meeting on **Wednesday, January 10, 2024 at 7:00 p.m.,** in the City Commission Chambers at the Opa-locka Municipal Complex, 780 Fisherman Street, 3rd Floor, Opa-locka, Florida, to consider the following items for final adoption:

FIRST READING / PUBLIC HEARINGS:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN TO INCORPORATE THE ADOPTED 2022 10-YEAR WATER SUPPLY FACILITIES WORK PLAN UPDATE AND TO STRENGTHEN THE COORDINATION BETWEEN WATER SUPPLY PLANNING AND LOCAL LAND USE PLANNING BY AMENDING CERTAIN OBJECTIVES AND POLICIES IN THE INFRASTRUCTURE, CONSERVATION, INTERGOVERNMENTAL COORDINATION AND CAPITAL IMPROVEMENTS ELEMENTS AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3177(6), FLORIDA STATUTES; PROVIDING FOR TRANSMITTAL; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, PROVIDING FOR EVALUATION AND APPRAISAL BASED AMENDMENTS TO THE OPA-LOCKA COMPREHENSIVE DEVELOPMENT MASTER PLAN AS REQUIRED BY AND IN CONFORMITY WITH SECTION 163.3191(1), FLORIDA STATUTES; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN AND SCRIVENER'S ERRORS; PROVIDING FOR CONFLICT AND REPEALER; PROVIDING FOR LIBERAL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

SECOND READING / PUBLIC HEARING:

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, ENTITLED "OFF-STREET PARKING AND LOADING REQUIREMENTS" TO SPECIFICALLY AMEND SECTION 2-152(F) ENTITLED "GENERAL PRINCIPLES" TO PROVIDE FOR OUTDOOR STORAGE OF VEHICLES ONLY IN A DESIGNATED PARKING SPACE, PROHIBITING DOUBLE PARKING AND REQUIRING THAT ALL AREAS ARE FREE FROM UNSIGHTLY CONDITIONS; AMENDING ARTICLE VI OF THE CITY'S LAND DEVELOPMENT REGULATIONS, SPECIFICALLY SECTION 2-160 (C)(4) ENTITLED "PERMITTED OFF-STREET PARKING" TO REQUIRE A CURRENT VALID LICENSE PLATE FOR RESIDENTIAL PARKING AND FURTHER REQUIRING THAT VEHICLES PARKED AS COMMERCIAL AND INDUSTRIAL FACILITIES HAVE A VALID LICENSE PLATE AND OR BILL OF SALE AND WORK ORDER POSTED VISIBLY ON THE DRIVER'S SIDE WINDOW, INCLUDING VIN NUMBER FOR VEHICLE, BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION IN CODE; PROVIDING FOR AN EFFECTIVE DATE.-

RESOLUTIONS / PUBLIC HEARINGS:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE SPECIAL EXCEPTION REQUEST FOR THE CONSTRUCTION OF A TWIN HOME BUILDING IN THE SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT (R-1), ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200; PROVIDING FOR AN EFFECTIVE DATE.

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF OPA-LOCKA, FLORIDA, APPROVING THE FINAL SITE PLAN FOR THE CONSTRUCTION OF A TWIN HOME BUILDING ON THE PROPERTY LOCATED AT THE CORNER OF NW 17TH AVENUE AND OPA-LOCKA BOULEVARD AND IDENTIFIED BY FOLIO 08-2122-018-0200 IN THE R-1 ZONING DISTRICT; PROVIDING FOR AN EFFECTIVE DATE.

All interested persons are encouraged to participate and will be heard with respect to the public hearings.

Additional information on the above item may be obtained by contacting the Office of the City Clerk by telephone 305-953-2800 or email jflores@opalockafl.gov. To participate or provide comments virtually, please register on the City of Opa-locka website at www.opalockafl.gov no later than 7:00 p.m. on Wednesday, January 10, 2024.

In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodations to participate in the proceeding should contact the Office of the City Clerk at (305) 953-2800 for assistance not later than five (5) days prior to the proceeding. If hearing impaired, you may telephone the Florida Relay Service at (800) 955-8771 (TTY), (800) 955-8770 (Voice), (877) 955-8773 (Spanish) or (877) 955-8707 (Creole).

PURSUANT TO FS 286.0105: *Anyone who desires to appeal any decision made by any board, agency, or commission with respect to any matter considered at such meeting or hearing will need a record of the proceedings, and for that reason, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal may be based.*

Joanna Flores, CMC
City Clerk
City of Opa-locka

ARTICLE VI. OFF-STREET PARKING AND LOADING REQUIREMENTS

Sec. 22-151. Purpose and intent

The purpose of this Article is to ensure the provision of adequate pedestrian circulation and off-street parking and loading areas, to protect the level of service and capacity of existing streets, to avoid unnecessary conflicts between pedestrian and vehicles and to promote the general health, safety, and public welfare. These regulations shall apply to all parking and loading areas, including driveways for single-family and two-family dwellings, within the City.

Sec. 22-152 General Principles

Off-street parking and loading areas should be designed to minimize breaks in the pedestrian environment along the public street and create safe and comfortable passage for pedestrians. The following standards shall be met.

A. Unless it is shown not to be possible due to lot configuration, access issues, or health and safety issues, parking and loading areas shall be placed behind the front of the primary building façade except for single-family and two-family residential uses.

B. To the extent possible, adjoining parking and loading areas serving nonresidential buildings shall be interconnected.

C. Off-street parking and loading areas shall be designed to facilitate adequate movement and access by sanitation, emergency, and other public service vehicles without posing a danger to pedestrians or impeding the function of the parking area.

D. Off-street parking and loading areas shall be designed so that parked vehicles do not encroach upon or extend onto public rights-of-way, sidewalks or strike against or damage any wall, vegetation, utility, or other structure.

E. Ingress/Egress to and from corner lots shall be no closer than thirty (30) feet from any intersection and no closer than five (5) feet from any lot line.

F. Off-street parking and loading facilities shall be used solely for the parking of vehicles in operating condition by the patrons, occupants or employees of the use to which such facilities are accessory. No motor vehicle repair work, except emergency service, shall be permitted in association with off-street parking and loading facilities. The storage of commercial vehicles, except for those associated with the use, or merchandise or the sale of vehicles shall be prohibited in a required off-street parking or loading area, except as specifically authorized in this Chapter.

G. In no event shall parking or loading areas be provided in a manner that requires vehicles to back out into the public rights-of-way, or that requires vehicles to enter or exit a site in a manner which would require them to make an unlawful maneuver within the public right-of-way. This requirement does not apply to areas consisting of driveways serving single-family detached or two-family dwellings, although direct access onto arterial roadways is discouraged.

H. Parking and loading facilities shall be maintained in a clean, orderly and dust-free condition so as not to create a hazard or nuisance, at the expense of the owner or lessee. Parking and loading areas shall be resealed or repaved and pavement markings periodically repainted and on-site traffic control signs replaced, as necessary, to maintain a clear identification of individual parking and loading spaces and to facilitate the safe movement of pedestrian and

Section 22-160

3. No boat or vehicle parked in a residential district may be occupied or used for living, sleeping or housekeeping purposes.

4. No vehicle without a current license plate shall be permitted to park in a residential, commercial or industrial (except as provided herein) or public zoned area.

Reserved Sec. 22-161 – 22-170.